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ABSTRACT

These issue papers were prepared for a series of seminars that were sponsored by the U.S. Department of Education's Center for Libraries and Education Improvement, held in part of the Libraries and the Learning Society Project. These seminars brought together librarians, educators, library users, and others to focus on the most effective role for libraries in a learning society. The seminar papers were used as the basis for discussions that were summarized in the final report on the project ("Alliance for Excellence"). This document contains a foreword by Joseph Shubert; "School Library Media Programs and Their Role in Schooling: An AASL (American Association of School Librarians) Response to the 'Nation at Risk Report'"; and the five seminar papers--"'Stemming the Tide' of Mediocrity: The Academic Library Response," Richard M. Dougherty; "Vision to Purpose to Power: A Quest for Excellence in the Education of Library and Information Science Professionals," Jane Anne Hannigan; "Learning at Risk: School Library Media Programs in an Information World," James W. Liesener; "Public Libraries and Excellence: The Public Library Response to 'A Nation at Risk'," Douglas L. Zweizig; and "Libraries and the Learning Society: Relationships and Linkages among Libraries," Peggy Sullivan. (DMC)

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LIBRARIES AND THE LEARNING SOCIETY

PAPERS IN RESPONSE TO *A NATION AT RISK*

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
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Chicago 1984

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FOREWORD

The National Commission on Excellence in Education presented its report to President Reagan in April, 1983. Secretary of Education T. H. Bell had appointed the commission to address what he termed "the widespread public perception that something is seriously remiss in our educational system . . . ." Secretary Bell specifically requested the commission to assess the quality of teaching and learning in America's schools and to compare American schools and colleges with those of other advanced nations. During twenty months of work, the commission studied academic evaluation tools, identified educational programs necessary for student success in college, evaluated the impact of a changing society on education, and defined the problems that must be overcome to accomplish educational reform.

In the course of its work, the commission had papers prepared on a variety of educational issues, held hearings and meetings, visited schools, and received letters and information from concerned educators, business leaders, public officials, parents, children, and other citizens. The commission's report, *A Nation at Risk: The Imperative for Educational Reform*, became the focus of nationwide media attention. Weekly news magazines ran cover stories. Newspaper reporters interviewed the local educators, school administrators, school board members, state and local officials, and citizens.

Librarians who read *A Nation at Risk* generally reacted positively to its basic themes. Most, however, expressed surprise and sometimes indignation at the commission's failure to refer explicitly to the role of libraries in educational reform. Some librarians who had provided information to the commission were keenly disappointed that their research results were not included in the final report.

In the fall of 1983, the U.S. Department of Education, Center for Libraries and Education Improvement launched the Libraries and the Learning Society Project which included seminars in five cities. These seminars brought together librarians, educators, library users, and others to focus on the most effective role for libraries in a learning

society. The seminars were held in Boston, Chicago, Berkeley (California), Dallas, and Washington, D.C. Presidents and executives of three ALA divisions and representatives of other national organizations assisted the project advisory board in developing plans for the project to examine the ways all types of libraries could help implement the recommendations in *A Nation at Risk*. The ALA divisions involved included the American Association of School Librarians, the Association of College and Research Libraries, and the Public Library Association. The other national organizations included the American Association for Information Science, the Association for Library and Information Science Education, and the Special Libraries Association. Five ALA members prepared the discussion papers for those seminars.

The five papers used during the seminars, and now collected for this publication, were the basis for discussion that will be summarized in the final report on the Libraries and the Learning Society Project. *Libraries and the Learning Society: Papers in Response to A Nation at Risk*, along with the Libraries and the Learning Society report and *Realities: Educational Reform in a Learning Society* (the report of the American Library Association task force on excellence in education), has great potential for stimulating discussion, planning, and action to help librarians become involved in educational reform.

Joseph F. Shubert

SCHOOL LIBRARY MEDIA PROGRAMS AND THEIR ROLE IN SCHOOLING: AN AASL RESPONSE TO THE NATION AT RISK REPORT

On August 26, 1981, Secretary of Education T. H. Bell formed the National Commission on Excellence in Education to assess the quality of teaching and learning in our nation's public and private schools. The Commission's deliberations have concluded in "An Open Letter to the American People" titled *A Nation at Risk: The Imperative for Educational Reform.*

The American Association of School Librarians welcomes this timely report in its attempt to study, compare, identify, and define the problems affecting American education. The Association commends the Commission for its candid review and its recommendations toward the attainment of excellence within our nation's schools. The Association further commends the confidence which the Commission places in the American people (teachers, parents, students, administrators, etc.) to solve these problems creatively through improved standards of quality in teaching and learning.

The American Association of School Librarians, a membership society of school library media specialists in public and private elementary and secondary schools, has a long history in seeking equity and quality in instructional programs. It endorses the concept that all students have a desire to learn and that this desire can be nurtured through striving for excellence at all levels of education and in all educational environments. The Association believes that quality education of this nature can only be acquired in the schools when students are provided with essential resources to function effectively as individuals in the school, the community and the society. Basic to these essential resources are school library media centers with qualified school library media specialists within each school building.

An educational system desirous of reform can find solutions to *A Nation at Risk* through the instructional services provided by elementary and secondary school

library media specialists. These professional educators have the instructional resources of print and non-print materials which can bridge the gap between the humanities and science and technology. They possess the competencies which encourage access to knowledge and to a broad scope of opportunities in this information society. They search for relevancy, accuracy, and diversity in the selection of instructional materials. They seek to reinforce the common expectation of quality performance for all students as well as for the needs of the individual learner.

One of the essential elements to the success of attaining the concluding recommendations as cited in *A Nation at Risk* is the extent by which the educational community can incorporate the integral role of the school library media program in its search for excellence. School library media specialists have an unique contribution to make in the implementation of these recommendations. Their compentencies can:

1. Provide and develop a comprehensive, goal-oriented list of library learning skills and research activities designed for effective and efficient use of instructional materials during the school day and at home.
2. Acquire and maintain a literature base necessary to equip high school students and graduates with the ability to comprehend, write, listen effectively and understand the literary heritage of America.
3. Aid in the development of guidelines for the effective use of computers within the schools.
4. Prepare guidelines and support rigorous content, relevant material, and scholarship from publishers and producers of instructional materials and the newer technologies.
5. Review and establish access to specialized materials and instructional resources for students with special needs such as the gifted and those with learning disabilities.
6. Provide guidance to teachers and students in the most effective use of independent study periods from the early grades through high school.
7. Review, evaluate and recommend relevant and diverse instructional materials to achieve specific objectives of the curriculum.

October, 1983

"STEMMING THE TIDE" OF MEDIOCRITY: THE ACADEMIC LIBRARY RESPONSE

By *Richard M. Dougherty*

We are a nation with a long history and tradition for social concern. But we are also a nation whose values and beliefs in recent years have been sorely tested by a series of social, military and economic shocks.

The rise of rock and roll and its symbolic leader Elvis Presley for many adults portended a national moral decline. These critics conveniently forgot about the Black Bottom and the Charleston of their own generation, but in retrospect the rock and roll generation seems to have been one symptom of a nation that was losing its sense of direction.

In the sixties the civil rights movement tugged at the conscience of a nation that did not want to believe it could have been so inhumane in its treatment of thirteen million Americans. And the Vietnam War culminating with the Cambodian incursion came close to tearing apart the seams of our social fabric. OPEC's oil embargo of the mid seventies proved that we were no longer economically self-sufficient. And if the power of OPEC to manipulate our economy wasn't enough, the Japanese proved they could also out-perform their American industrial counterparts by building better automobiles and electronic devices. Watergate further undermined our confidence in those who govern us.

The turbulence of the last twenty years undeniably has tested our resolve, self-esteem and confidence as a nation. Now we are told that our vaunted educational system may be in disarray and we are about to be engulfed in a "rising tide of mediocrity." Little wonder so many people would like to return to the more placid, affluent Eisenhower years. This desire to return to a better time is reflected in a Merle Haggard lament, "Are the good times over for good?" Haggard yearns for the day when a "coke was a cola" and a "joint was a bad place to be." He asks, "Are we going down hill like a snowball to hell, are the good times over for good?" There are many doomsayers among us decrying the educational malaise, frequently they know very little but the critics are many and vocal.

I agree with Ernest Boyer's view ". . . that today America has the best opportunity it will have in this century to improve the schools."[1] The problems and the challenges have been documented in a series of reports on the status of education. What we need is to accept a challenge similar to President Kennedy's challenge that we place a man on the moon by the end of the sixties. We spent billions creating and harnessing new technologies and building a new industrial infrastructure to manage the space program. Education responded to the post-Sputnik era by creating an education establishment that is still the envy of many countries. We can't return to a simpler day, but we can accept the challenge to stem the rush toward educational mediocrity.

Who Is to Blame? In my judgment, the symptoms of decline are readily evident. Persistent declines in test scores, the growing ranks of marginally literate graduates, the crowded classrooms of students seeking remedial English and math even at our nation's most prestigious colleges and universities are but a few of the most visible symptoms. There seems to be little disagreement that the problem is real, there is less agreement on who or what is to blame. We all have our own favorite candidates for scapegoat: selfish labor unions, hide-bound school administrators, apathetic teachers, disinterested parents, a rootless society, insensitive politicians, or pernicious taxpayers. The list of culprits could be extended so no group in society is blameless. We are all part of the problem.

The *At Risk* report struck a responsive chord among parents of school-age children. But we should be sensitive to the feelings of those who have labored in our schools and classrooms, often under severe handicaps in recent years. Parents are unhappy with the quality of education their children receive, but few are in a position to understand what has gone wrong or what to do in order to reverse the decline. They can only vent their frustration by voting down school tax millages or by transferring their children to private schools. These acts stem feelings of anger and a sense of helplessness. Neither, unfortunately, contributes to a constructive solution. And too often the classroom teacher becomes the focus of local parental frustration.

Teachers and school administrators have justification if they react differently to the current wave of criticism. Administrators feel hamstrung by confining contracts,

rules and regulations; teachers feel they are underpaid and not appreciated, they often feel under seige; at the least they are unable to maintain classroom discipline, at worst they fear for their personal safety. And their students, teachers are repeatedly reminded, are only marginally prepared to function in an adult society.

There is really no answer to the question, "who is to blame?" And while nothing will be solved with finger pointing, it is an unavoidable reaction which might also serve as a catharsis for releasing the pent up anger and frustration. Once the initial anger has subsided, we can begin to forge an instrument of national policy. Although non-partisan, the *At Risk* report is essentially a political statement; it describes a real problem. This is the first positive step toward a solution, for only an aroused citizenry can lead to a national commitment to rebuild our educational system and lead the nation's education sector from its present malaise.

The *At Risk* report sets the stage for action. Now we must define the current problem even more sharply, establish priorities, and outline a series of actions that first *stems* the tide that threatens to engulf us and, second, *reverses* that tide by restoring the long tradition of each succeeding generation being educated better than the last.

I have not yet mentioned the word "academic library." This is not an accident. The erosion in the quality of education is not due to a decline in libraries or library services. Rather, this absence of attention reflects the reality that libraries are not judged central to the current problem. The problem is one of deficiencies in basic skills such as reading and writing. It is secondary school educators and not librarians who are trained to teach these skills. Realistically speaking, one cannot hope to promote an acceptance of a lifelong learning habit to a person who is struggling to complete a job application form. Nonetheless, there are important roles for school, public and academic librarians. As we develop our roles we should make every effort to orchestrate our activities with the work of teachers, administrators, college faculty and university officials. To be successful, to make an impact on students, we must be in the mainstream of activity.

Scope of the Paper. In this paper I will suggest ways in which libraries can contribute to strengthening our educational system and identify several obstacles that must be

overcome or circumvented in order to succeed. While there may be differences between the responses that a research library, college library, or community college library might make, I will focus primarily on the generic academic library in order to minimize distinctions which may not be central to my thesis. The concluding section examines strategies libraries and their parent institutions might adopt in order to better achieve their programmatic goals and objectives.

To begin, I will review some of what we know about libraries and learning, the use of library resources, and special services to educationally disadvantaged students. A review of the literature gives one the feeling of déjà vu; there is much we have already accomplished, and there is always the fear that we will reinvent the wheel rather than build upon what we have already learned.

What We Know. In most instances we can predict with reasonable assurance what will be the outcome of almost any program we offer. Our libraries, whether in colleges, junior colleges, or universities, are heavily used, but at the same time library resources and services are underutilized. Very few students or even faculty are able to take full advantage of the richness of library collections. This paper does not address the promise of technology, either to control bibliographic information or to provide improved access to resources. Technology will provide important tools which we will use to achieve our purposes, but in the context of addressing specific educational deficiencies, I view technology as a means to the end. It is the final outcome which this paper addresses.

Several seminal studies are still frequently cited. Unfortunately, their lessons and recommendations have gone largely unheeded. For the purposes of this paper it is only necessary to highlight a few of the more significant.

Harvey Branscomb's *Teaching with Books* is a logical starting point. It was Branscomb's work that gave a special emphasis to what became known as the library-college movement.[2] Louis Shores, the movement's chief guru, envisioned librarians as taking over some of the traditional faculty functions. This would be accomplished by creating an independent learning environment. Students would work at their own pace in the library, surrounded by the resources of the library with the expertise of librarians readily available. Obviously, such an environment would partially displace the traditional classroom experience.

The library-college movement continues to have its

advocates, but it is safe to conclude that the movement has had a minimal impact on the education of students. This is not surprising since one could have predicted how classroom faculty, who have an enormous stake in the definition of the classroom instructor's role, would react to the library-college philosophy. Whether intended or not, the movement posed a threat to the classroom teacher. Moreover, the advocates of the library-college movement couldn't guarantee success of the independent study mode of learning.

Patricia Knapp, in my judgment, produced some of the most useful work concerning interactions between librarians and classroom instructors, using library resources to improve classroom teaching. Her work might be categorized as bibliographic instruction, but it was also much more. Knapp identified numerous principles that are still relevant. In one study she concluded that even when special programs were offered, the library still served a minority of students. Her research clearly shows that use of the library by students is very dependent upon the classroom instructional methodologies employed by faculty.[3] Other writers have identified the same principal tendencies, but Knapp's work provides a model.

Later, Knapp undertook what became the highly publicized project The Monteith College Library Experiment. Monteith College was a special unit of Wayne State University, and the college offered an opportunity for Knapp and her colleagues to undertake a series of special programs. In reporting on her work, Knapp writes:

> The ultimate purpose of the Monteith library program was to stimulate and guide the students into developing sophisticated understanding of the library and increasing competence in its use. To achieve this end, it proposes to provide students with experiences that are functionally related to their course work. Planning such experiences will involve library and instructional coordination on an unprecedented scale. The specific objectives of the first phase of the program, the pilot project, therefore, are (1) an appraisal of a structure established for the purpose of attaining this coordination, (2) an exploration of new methods of relating the library to the instructional program, and (3) a preliminary assessment of the effectiveness of these methods.[4]

Knapp intended her staff to work with faculty as they

developed course assignments. There was hope that such collaboration would lead to more purposeful student use of library resources. This librarian/faculty interaction also made it possible to analyze and appraise the project's planning process.[5]

The Monteith project generated only mixed results. But any reader of Knapp's work should be able to gain a realistic understanding of librarian and faculty attitudes, which is important since the same attitudes are likely to be encountered as we initiate programs in the future. There is no need to relearn what was so clearly documented in the Monteith project 20 years ago.

Susan E. Edwards and her colleagues at the University of Colorado conducted a well publicized project designed to ". . . find, with the help of the subject department faculty, alternatives to the lecture-textbook system and to find ways of encouraging high quality library research--within the context of the subject matter courses." The project hoped ". . . to find new and better ways of integrating library instruction into the curriculum and to increase the number of students who will be exposed to systematic library instruction."[6] The Colorado project achieved a certain measure of success because, like Knapp, they identified several reasons why faculty didn't rely on library resources to buttress classroom presentations and assignments.

John Williamson reported on a project at Swarthmore College, the "Teaching Library." Unlike the library-college movement, Williamson noted that the Swarthmore program conceded to the faculty its traditional functions, but attempted to aid the faculty in fulfilling those functions more efficiently.[7] The program aimed to provide students with the bibliographic and library skills required for life-long independent work. The Swarthmore experience once again underscored the notion that faculty must recognize the integral role of library materials in courses of instruction. If one expects greater integration of the library with classroom functions, this basic recognition is essential.

One obstacle to achieving greater integration of library resources and classroom instruction, according to Williamson, is in part due to "faculty intransigence and partly an indication of the difficulty in working up assignments that serve the ends of a given course while at the same time fostering library skills."[8] Williamson argues that in the final analysis, with the exception of senior staff, librarians will not be accepted in faculty circles as equals unless they have achieved

personal or scholarly attainments "despite their vocation."[9] The Swarthmore experience suggests there is an absence of natural affinity between faculty and librarians that is necessary for the success of joint programs.

Joan Bechtel writes about possible contributions of the library-college idea, recognizing the importance of Patricia Knapp's work. Bechtel also emphasizes the need to acquire faculty support and to recognize that a library project is important to a particular course.[10] James Kennedy points to the importance of creating a receptive educational climate, and by this he means that students will not use the library unless faculty members consider use of the library as an important element in education.[11] Timing of library education programs is also important. Bechtel argues that a short explanation on library use during freshman orientation is useless. Students will forget whatever is presented in the way of library instruction unless it is presented at a time when they need it and must use it.[12]

In the works cited, several common themes keep surfacing, what faculty will and will not do, what conditions must be present in order to gain faculty participation, etc. Unless the campus environment has changed in recent years, we don't have to begin our planning by wondering "what does the user (faculty) want?" We already know about user needs. The research of the last 20 years tells us how best to organize a joint library/faculty program and what pitfalls and disappointments we can expect to encounter.

Educationally Disadvantaged Students. Educational aid to disadvantaged students continues to be a visible, though inadequately funded instrument of federal educational policy. I will not attempt to tear apart the factors that led universities to give greater attention to educationally disadvantaged students; but one result of federal intervention and student unrest was the establishment of open admissions policies at some universities. The unrest in the New York City area led officials of the City University of New York (CUNY) to adopt such a policy. Patricia Breivik has examined the effective use of CUNY libraries in providing support to students who frequently did not possess traditional levels of academic preparation.[13] The Breivik account offers many insights into the successes and failures an institution risks when it institutes a dramatic change. One really can't extrapolate how suc-

cessful the CUNY libraries might have been because they were not well funded by the administration. Consequently, the libraries weren't able to assimilate students motivated by different social motivations and views of social behavior. Nonetheless, Breivik points out that:

> Educationally disadvantaged students, then--insofar as any group can be generalized--cannot be characterized by their ethnic or cultural background or by their level of intelligence or academic mastery. However, they are easily discouraged, are often impatient, and need basic support by way of financial aid, counseling, and--particularly in communications skills--remedial training. They are willing, if they can see a way to fight to survive in the academic world, as in their home environment.[14]

Resnick and Kaplan point out that institutions that accept students who possess divergent qualifications and needs must be prepared to overhaul traditional educational theories geared toward adequately prepared students.[15] If one accepts the Resnick and Kaplan premise, it follows that the commitment to disadvantaged students must permeate the organization, reaching down from administrative mandates to include commitments of those who are on the firing line--the classroom instructor and the librarian.

Many institutions have established local programs to aid minorities. The literature suggests that results have been mixed. In the library world, we can point with pride to programs such as the UCLA library instruction program for educationally disadvantaged students. This program was developed by Miriam Dudley.[16] Her self-study approach to library use is frequently cited as an exemplar of its type tool and has been adopted by other institutions. Most library efforts to serve disadvantaged students have originated in the library; not many library programs seem to have been closely coordinated with campus activities. The State University of New York at Plattsburgh is an exception. The Plattsburgh campus strategy involves a six-week preadmission program for incoming educationally disadvantaged students. Library staff teach a five-week course in basic library skills as an integral part of the campus program. Other topics of instruction include mathematics, writing, reading and communications. This program has been reported to be well supported by counselors, student tutors and lab group activities.[17]

Thomas W. Shaughnessy and Carol Truett in separate studies report more discouraging, yet possibly more typical results. Shaughnessy studied library services to educationally disadvantaged students among a small group of university libraries. Services to disadvantaged, he reported, was more effective when a librarian was employed directly by the Educational Opportunity Program office (EOP); otherwise there was little informal communication between library and EOP staff.[18] There seemed to be some correlation between the degree of success achieved and the presence of a librarian in either the library or the EOP office. Shaughnessy reports the customary dilemma of numbers: too many students and too few faculty and librarians to provide the badly needed special attention. Not surprisingly success was related to the ethnic identity of the person providing service to disadvantaged students. Shaughnessy found that those interviewed expressed concern that "while they were able to relate effectively to students who were of the same ethnic or racial background as themselves, they questioned their effectiveness in reaching students of other racial or ethnic backgrounds, especially those for whom English is a second language."[19] Carol Truett found that in a group of community colleges in Texas less than 20 percent of the schools surveyed provided a strong library services program in support of campus developmental education programs.[20]

In a way both Shaughnessy and Truett are looking at the same problem from different angles, each using different instrumentation. The common thread is that the libraries do not seem to be in the mainstream of institutional educational and service programs.

E. J. Josey, long associated with the cause of minority students, provided the outlines of a blueprint for action over a decade ago. Josey, in describing the efforts of City University of New York to make its open admissions policies a success by involving the libraries as integral support services, points out some of the potential activities that libraries could offer to aid developmental students. Josey numbered among his recommendations services such as special library counseling, reading guidance, library use instruction, and special tutorial service in the library using honors students and other service-oriented volunteer groups to match the resources of the library with needs of disadvantaged students.[21] We know what needs to be done, what is lacking is the institutional commitment and a realistic level of resources.

LIBRARY ORIENTED PROGRAMS

Campus libraries can take the initiative to sponsor programs designed to improve the understanding and use of information related tools, or they can co-sponsor activities with colleges of education, extension agencies or local public library facilities. My suggestions are intended to illustrate ways in which libraries can work actively to improve the education of secondary and post-secondary students and faculty. I'm sure readers can suggest other, and more creative ideas.

Bibliographic Instruction. Expansion and enrichment of existing bibliographic instruction programs is an obvious candidate. Such programs may be designed to help students become more proficient in using the library and more importantly, to help them gain proficiency in use of discipline-oriented literature. Library instruction programs can be pegged to assist students in college-bound schools, already in college, undergraduates enrolled in teacher training programs, instructors in secondary schools and/or schools of education, and students and teachers enrolled in extension courses. Whatever is the target group, it is important to keep firmly in mind that the principles identified by Knapp, Bechtel and others pertain: thus, the programs must be designed to involve the affected faculty and linked closely with existing academic courses so that students can relate bibliographic instruction to their existing academic programs.

Training the Trainers. Librarians can play a more active role in providing instruction to students who are actively working to earn teaching degrees. Courses could be organized jointly under the aegis of the library and the College of Education. The purpose would be to offer future teachers a foundation of knowledge and an appreciation of libraries and information resources that is currently lacking. Also, interaction through extension programs could be given to teachers already in the field. Similar courses could be offered to practicing teachers as part of individual professional development programs.

Information Services. Academic libraries house a rich reservoir of information materials supporting research and new developments in education and related disciplines. The literature of education is well controlled and can be

accessed through the ERIC data base. Libraries can play a more direct role supporting the work of individuals, research teams, or administrators either on campus or in local communities by providing services for selected dissemination of information (SDI).

Extension Services. Few academic libraries place much emphasis on serving groups not connected with their parent institution. There are undoubtedly notable exceptions but rarely do "extension services" fit into the high priority category of services. The summer program reported by Richard Wood of Slippery Rock State Teachers College and the program at the Plattsburgh State College are among the exceptions.[22]

Closer cooperation between campus secondary school libraries in the same geographic area could build bridges that are currently lacking. A project directed by Joyce Merriam at the University of Massachusetts, Amherst, investigated what a group of high schools in the surrounding area were doing to prepare students to use libraries.[23] It was Merriam's thesis that library instruction could be tailored and the processes made more personal if contacts with high schools and students could be established. The author collected documents from thirty high schools in the Massachusetts area that had been prepared by school librarians as material for local library and bibliographic instruction programs. These documents included items as pretest exercise sheets, information sheets on the use of basic library tools such as the card catalog and other basic reference tools, library handbooks, outlines for student aid programs, handouts outlining suggested search strategies, etc. Merriam then contacted the students once they arrived at the University of Massachusetts, Amherst. campus. She reasoned by knowing something about the library instruction the students had received in high school, she would be better able to provide specially tailored programs of student instruction. If academic libraries are to play a more central role in preparing students to access and use information resources, extension activities along the lines of Merriam's experiment should assume greater importance.

There should be a logical progression in the teaching of library strategies beginning with primary schools and continuing steadily through college. High school and college librarians should develop a learning sequence so that high school students can receive credit for learning in

library instruction as they receive credit for mathematics and English. How many times must students be introduced to the card catalog or to *Readers' Guide*? Concepts and techniques learned in high school need not and should not be repeated.

Services to Educationally Disadvantaged Students. The mediocrity referred to by the *At Risk* authors refers to the bulk of our school age population, but there is a special need to aid those groups that are frequently categorized as educationally disadvantaged. There will continue to be an urgent need to offer remedial and enrichment programs to students who wish to attend college but for one reason or another are inadequately prepared for academic level coursework. Specially designed programs can be a great aid. The success of some programs is reported in a study authored by Chen-Lin Kulik, James Kulik, and Barbara Shwalb using a meta-analysis.[24]

Reducing the high dropout rate of minority students is a special concern of many universities. In a very practical sense, my own institution, the University of Michigan, is very concerned about higher dropout rates associated with minority students. What we need are programs to help minority students assimilate into academic environments and provide them with the basic skills needed. One strategy is to link together the talents of librarians, counselors and reading instructors using the library environment as the program's focal point. This is exactly what has been proposed by the Undergraduate Library and the Center for Reading and Study Skills at Michigan. The program, called INFO-SKILLS, has as its objective to provide remedial instruction and the social support systems that disadvantaged students require to help them cross the bridge from secondary to collegiate level instruction.

Barriers to Be Surmounted. There are undoubtedly other, perhaps more creative ways to involve libraries in efforts to improve educational performance, and to deal with a number of economic barriers that block our road to progress. Instilling a higher level of "information competence" in students and teachers will require a recognition of the librarian's role that heretofore has been absent. If Knapp and others are correct, librarians still face an uphill battle before we will be viewed as full partners in the educational enterprise. The issue is not just a matter of status, it is also a matter of turf and roles. Like the

library-college movement, efforts to expand library involvement in campus programs are likely to be viewed by some as encroachment on their turf. Anyone who has organized a multi-unit program for instructing disadvantaged students probably understands just how sensitive this can become. Campus administrations may have to lead in finding ways to navigate the treacherous mine fields of academic turf-doms.

The present social environment will also obstruct progress. The tax base of many urban and rural districts has been badly eroded in recent years. Money to support expanded programs will be scarce. Within individual institutional environments many schools and colleges must resolve the obstacles presented by union contracts and government regulations and policies. These bureaucratic constraints will inhibit freedom of action, innovation, and instructional diversity. If significant progress is to be made, exceptions (or if necessary concessions) to existing organization policies and contracts must be not only accepted, but promoted.

One must not overlook the inevitable organizational resistance to change which is simply institutional inertia. Schools and colleges have not been notably receptive to external pressures. Even the student protests of the last decade achieved only a small measure of the institutional and educational reforms the students sought. Academic institutions prove to be remarkably resistant to these outside pressures. Consequently, incentives that energize the faculty must be found. (The issue of incentives is dealt with later.) Educators and college officials must be convinced to create special programs for educationally disadvantaged students; this will require new or expanded programs to improve student skills in reading, study, information gathering, and writing skills. To achieve these goals, no amount of rhetoric will substitute for large and sustained infusions of funds.

Before leaving the subject of barriers, I want to underscore what I sense to be a deep frustration felt by librarians whose specialties are library and/or bibliographic instruction. It is easy to talk about the need for librarians to become more proactive, but most libraries are inadequately prepared to assume a more active stance. Most struggle to maintain current levels of activity; the capacity for expansion is not available. Few libraries could sustain expanded bibliographic instruction programs. The financial stringencies of recent years have forced libraries to cut

what fat might have previously existed. If libraries are to plan an active role, additional dollar resources must be forthcoming.

IMPLEMENTATION ISSUES

Our society often attacks problems with a naivete that is almost frightening. We seem to assume throwing money at problems guarantees solutions; we become impatient if solutions don't materialize quickly. Unlike Europeans we seem to have no sense of history. We build superhighways and allow state roads to disintegrate; construct suburban shopping malls and allow beautiful inner-city buildings to deteriorate. Eventually we will have to rebuild our inner-cities and resurface our nation's transportation system unless we are prepared to abandon them. Their reconstruction will be costly.

Now, as society teeters on the brink of reestablishing education as a national priority, let us not begin by attempting to replace the existing infrastructure. Rather we must build on our existing knowledge and expertise. I hope we adopt a "building block" strategy promoting the rebuilding of our secondary schools and the establishment of closer linkages between secondary schools and post-secondary institutions. I'm not referring to a bricks and mortar rebuilding but to a rethinking of rules and policies which govern schools and the roles of teachers. We have already begun to rethink issues such as classroom behavior, homework, student discipline, merit pay, teacher involvement in course planning, etc.

High school, collegiate, and school librarians should begin to work more closely together. Such collaboration might have enhanced numerous projects already reported in the literature. For example, Mae Frances Moore and Helen Yee reported on a program conducted at an Oakland, California, community college with a special institutional emphasis on vocational education.[25] The library program was designed specifically to help students who were educationally disadvantaged and for whom English was a second language. Such a program would have been strenthened had the authors been able to relate formally their library oriented program to those in the area of secondary school library programs. Similarly, the Merriam project cited earlier might have been enhanced had formal institutional agreements between the University and a

group of area high schools existed. There is no reason to believe that academic and high school librarians wouldn't work together if such programs had the imprimatur of their institutions, and if the institutional and professional reward systems were structured to recognize such collaborations.

Campuses would be wise to review existing programs and capacities: what is going on already, how much money is being spent, and how much overlap exists? What strategies can be used to avoid duplication and avoid inter-unit competition? An inventory of existing capacities might be complemented by new commitments to redirect campus resources and to seek additional resources from funding agencies. An extract from one institution's budget request to the state illustrates a number of relevant concerns:

> . . . we are making one specific request that is aimed at enabling the University . . . to help with a major state and national problem of University interaction with secondary school teachers in the state. To do this we propose to create a *Center for Basic Education Enrichments*. Like the outreach program, organized as part of the English Composition Board in the late seventies, the proposed center would support a selected number of university faculty (10 to 15 FTE) in offering organized workshops and conferences specifically designed to support classroom teachers and their efforts to enhance the quality of the learning experience. The Center would focus on a limited number of basic disciplines, particularly mathematics, science and humanities with the objective of maintaining an ongoing partnership between university . . . faculty and their colleagues in the K-12 system.

The request reflects a renewed sense of priority, but it also underscores the lack of awareness about libraries. There is no mention of information resources or library involvement and/or of the importance of basic skills lacking in so many students. Moreover, there appears to be scant acknowledgment of existing programs in the University's College of Education. It is both an example of renewed interest and the tendency to graft new programs onto those that already exist. This request might have been more convincing had evidence of the aforementioned "building block" approach been adopted.

Incentives. The issue of incentives is one of the thorniest that must be faced by anyone who desires to reshape academic priorities. At many universities, teaching itself (let alone remedial teaching) is not considered important in tenure or salary deliberations. Untenured instructors quickly recognize that innovative teaching is not rewarded unless the teaching is accompanied by evidence of original research scholarship. While some academics are willing to focus their energies to right a social wrong no matter what the personal consequences, most of us set our priorities to produce the greatest payoff. Isn't it time we faced the issue head-on? If we want faculty to engage in remedial teaching, then their academic advancement must be enhanced or at least not placed in jeopardy by such involvement. State agencies, academic officers, and tenure and promotion committees must be willing to alter academic reward systems. Without an appropriate match between institutional and instructor expectations, programs to enhance teaching and learning will remain at the margin of academic attention.

Marketing and Public Relations. We in academe frequently seem to avoid the appearance of marketing ourselves and our services. There is a stigma attached to the "Madison Avenue" approach to promotion. Paradoxically, we forget that the principles of innovation, identified long ago by researchers such as Rogers, pertain to the academic community as well as to other professions and businesses.[26] If we are not willing to market and promote ourselves and our services, we can be assured that they will not become known, accepted or adopted by those we wish to reach. The American Library Association provides a model of what a professional association can accomplish. The current "Read More About it" campaign is but one example of how libraries can be brought to the attention of the public.

Higher education associations and agencies such as the American Association of Universities, the Association of Land Grant Schools, ACLS and the NEA could be helped if they adopted more aggressive stances on the concept of lifelong learning and the importance of institutional support. These organizations could help convince not only the memberships they serve (i.e., individual colleges and universities, teachers and instructors), but they could also transmit our message to government agencies.

Translating What We Know into a Program of Action. Numerous distinguished commissions and committees appointed by foundations have identified the problems, established agendas, and issued calls for action. Fortunately, there is much already that we know related to improving learning among primary, secondary, and college students. Currently we are still assessing the situation. It has been painful for some to acknowledge the existence of this serious problem. What is needed now is to convert the growing national consensus into an action program.

Our nation can afford the cost, that issue is beyond any question. It is a matter of reordering priorities. One only has to watch the evening news or read the daily newspapers to realize the funds necessary to underwrite a national commitment toward education exist. More than a generation was required for the erosion of our education establishment to become painfully apparent, and it will take more than a generation of sustained effort utilizing the best technology society can provide and adequate funding to restore education to its former status and to instill into our society an appreciation of the importance of life-long reading and learning in this, the post-industrial age.

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VISION TO PURPOSE TO POWER: A QUEST FOR EXCELLENCE IN THE EDUCATION OF LIBRARY AND INFORMATION SCIENCE PROFESSIONALS

By *Jane Anne Hannigan*

Education has traditionally held an uneasy place in American society. We acknowledge its role in the greatness of our country, but we frequently refuse to support it and pay adequate wages to its practitioners.[1] We expect much from schooling but fail to recognize its role in the improvement of our lives. On the other hand, we are quick to place blame on the schools for everything from highway accidents to drug abuse to broken families. It is, however, at times when this country's technological, military or economic superiority is challenged that reports and commissions on education proliferate and have their greatest power. The post-Sputnik curricular commissions certainly had a major impact on all levels of education in the United States. Now *A Nation at Risk*[2] is serving as a focal point for the latest, and one of the most publicized, challenges to our educational system. Those of us involved in and committed to education must seize this opportunity to explore both the purposes and the power structures of schooling to move the nation from this declared state of mediocrity to that of excellence.

Although *A Nation at Risk* emphasizes secondary school education, it contains much which challenges graduate education both in its general concerns and indirectly through the corresponding changes necessary at all levels of education if secondary schools respond successfully to this mandate. The emphasis on "Basics" (including computer literacy), higher standards and increased time on task with a longer school day and school year will certainly have impact on the undergraduate and graduate programs that students from such schools will enter. Other recommendations concerning the selection and retention of teachers have very direct significance for the education of library and information professionals. Librarians, like teachers, are in the lower professional levels according to both

status and salary, and radical action is necessary to improve this situation.

The final recommendation on leadership and fiscal support is essential to the continuance and the development of all education in this country. It is imperative that we clearly define what is to be accomplished at each level of schooling and how the information needed by funding agencies is to be determined and delivered. Only when our purposes are clear can we expect to command the kind of power in the marketplace that will enable us to fulfill our commitment to the process of life-long learning.

Dr. Harry Judge of Oxford University identified a conundrum in his investigation of U.S. graduate schools of education for the Ford Foundation. He wrote of his puzzlement as follows:

> Why should famous graduate schools apparently central to so much in American public and academic life, be regarded as, and regard themselves as peripheral, as insecure, as undeserving of self-esteem.[3]

Although Judge was not discussing graduate library schools, I believe he could well have been doing exactly that. We share with our professional colleagues in teacher education a kind of identity crisis, an uncertainty as to whether we should be concentrating on the arts and sciences of library education or on the profession of library education. Michael Timpane has clearly stated that a school of education must be a professional school in which research and scholarship are central.

> Schools of education will become mature professional schools to the extent that they *create* knowledge that will advance the field, *transmit* the scientific basis for practitioners of teaching, administering, counseling and the like, and *use both* to undergird the clinical training of students.[4]

This process is one that library and information science educators must engage in as we move toward our own maturity with clarity of purpose and a wise perception of power.

All educators must move beyond the primarily quantitative recommendations of *A Nation at Risk* to focus on and deliver really substantive qualitative changes in the educational opportunities offered to all people in our society,

from preschoolers to senior citizens. The preparation of those in all the educating professions, including librarianship and information science, is critical in this process. New or improved course offerings, at whatever level of schooling, or increased time on task will not necessarily improve education if those providing that education are not themselves better educated.

ON THE PROCESS AND PROBLEMS OF CHANGE

Perhaps librarianship is faced with even greater problems than those of education. In fact, its very existence is being challenged. Is it possible that librarianship is disappearing as a profession? This is a difficult question to answer. Given the ready availability of information and the re-orientation of individuals and various professional groups to access that information more directly through electronic means, it could be so. Certainly library and information professionals cannot continue as we are. The nature of the field is changed and should continue to change. We seem to flutter as tiring butterflies trying to hold on to a rapidly changing environment when we should be taking the lead to initiate the most appropriate changes. Diversification is certainly one factor to be considered; we should seek a variety of professional directions rather than a "one model" approach.

We have consistently tried to educate almost all librarians and information scientists in one mold. This simply cannot be done--it never could. School library media specialists and children's librarians have long had specialized programs to meet special needs; then some degree of specialization in other areas became the rule. Nonetheless, all programs are ordinarily housed within a single institution and share many of the same courses. Full and rigorous programs of specialization have seldom been possible for two reasons: (1) insufficient faculty in any one institution to accommodate all the special needs, and (2) the overall expense of such programs. Although there are advantages to different types of librarians studying together, perhaps the time has come for library schools to recognize that they can be qualitatively superior only by limiting the number of specialized programs they offer and thus concentrating limited resources. Library educators must give up the rather immature notion that we can be all things to all persons; we must accept that this is impossible and

select the professional territory in which excellence can be achieved. This might mean that some schools will educate professionals for a particular type of library, others may educate for type of service, others for information science, still others for technical automated systems, and still others for higher level management functions and so forth.

The considered decision to make such changes is not easily achieved since vested interests and a too often blind respect for history and tradition abound. Perhaps some clever Deans will envision a means of exchanging faculty among schools to consolidate like resources and develop the kind of strong but diverse programs I am describing. A significant problem, however, is that many faculty members would be faced with re-training or re-locating. This is not a bad notion and parallels most of the world of work; if one cannot meet job expectations in a particular time and place, that person is forced to seek new employment elsewhere. If faculty do not seek to upgrade their abilities, the Dean and senior faculty must address this problem. The difficulty is that it may be precisely these administrators and senior faculty members who are most firmly entrenched both in their positions and in their time-proven ideas and methods. This problem might be considered justification for the abolishment of tenure in higher education and particularly in professional schools. Even more serious is the question of whether those who do keep up with scholarship and practice in a field should have job protection if that particular field of study is no longer a viable offering in the institution.

An additional dilemma is faced by both the administration and the faculty when changes in programs are contemplated, that is, the constituency of the school often does not respond favorably to what could be considered radical approaches to change. If a school has traditionally educated for several types of libraries, a proposed change in that arrangement will cause outbreaks of disgruntled and grumbling alumni and other friends of the school. At the same time, I might point out that these are often the very persons who complain about the need for a given school to change, to meet current needs, and to plan for the future.

In the past two decades, library education has moved from managing expansion to managing retrenchment. This expansionism was reflected in the name changes of schools, increased courses in information science and in more and more courses and programs to meet immediate interests and

attract potential students. In the first stage of this process faculty became more highly specialized and more autonomous in their behavior. Faculty development in higher education has sometimes even been defined as an increase of autonomy. Now, during a period of retrenchment, this kind of autonomy is inhibitive of the kind of planning and cooperation necessary for survival. Individuals are using all their energies to save their own very narrow turfs within a school rather than responding to the need to reexamine the whole field of library and information science. In the process, they are putting entire schools in jeopardy. The decision to cut programs and specific courses is often made on a bottom line philosophy unacceptable to most members of the academic community. It is significant, however, that faculty members seldom spend the time designing revised and economically sound programs of study that will meet bottom line expectations.

At the present time, most library and information science schools profess to do far more than they could possibly do well. There is no question in my mind that the pretense embodied in isolated course offerings for types of library service rather than full-scale programs is an unethical stance. For instance, one course in public libraries or one course in academic librarianship does not a program make. Excellence demands immediate elimination of such practices. Either a school has a full-scale program with appropriate support or it does not--no fudging allowed! This is an area in which I believe COA has failed to adequately measure the goals of an institution against its performance. If a school has in its mission statement the education of librarians for all types of libraries, then it behooves us to verify how this is accomplished. We must, as a profession, acknowledge that some of our programs are third rate and vastly imperil our overall professional mission. Accreditation as a process seems to measure minimum conformance to standards but does not, by definition, require excellence. Given the thrown gauntlet of *A Nation at Risk*, we as a profession must take the opportunity to seek ways of identifying, encouraging and even institutionalizing excellence.

ON THE CRITERIA FOR EXCELLENCE

An examination of the positioning of library schools within the parent institution reveals varying configurations,

some of which may change considerably in the years to come. Some schools will retain their current autonomous positions within the structure of a major university; others will form new administrative and academic alliances with other graduate or undergraduate departments; still others will close. Some schools should close, but that determination should be made on sound intellectual and educational projections of both professional and fiscal viability. As a profession, we must learn to recognize excellence and reward that quality with survival and support.

A primary criteria for judging excellence would be the nature and rate of movement in the profession exhibited by graduates of a given program. This places the burden of excellence on the ability of the graduates to achieve their marks in the field of practice and to move upwards within that field. The rate of movement might form some interesting matrices. Of course, this cannot be considered an accurate measure unless admission and performance standards are more precise and more demanding. A second measure for judging excellence would be within the territory that Robert Hayes has staked out with his analysis of faculty productivity.[5] My argument with Hayes is in his exclusive use of citation analysis which does not necessarily allow for those who move along other paths not encompassed by such a technique. The concept he proposes is an excellent one but we should seek out additional means to judge professional activity and to report it.[6] My third criteria for excellence would be in the nature of research activity taking place in an institution. This might be judged by doctoral activity as well as faculty research. I believe that we need monies, and I mean large chunks of money, to establish the kind of research environments that exist in some other disciplines and then to test the relationship of that environment to the quality of education provided within it. I would like to see grants that require a large scale commitment to research in a given institution rather than the continued funding of "loner" concepts. I would also encourage funding of joint inter-institutional research activities. The education of the profession should itself be a focus of research in the field. My fourth criteria would be teaching excellence. Innovation and creativity in the classroom as well as dogged determination to increase the success of student learning is a hallmark of excellence. There is no doubt that each of these criteria are interwoven into a whole and that each is critical to our power in the marketplace if the education of information professionals is to continue as a viable commodity.

One potential pattern for the future of library education is the movement of library schools into a configuration with other schools and departments in which the library school as we now know it may actually cease to exist. Perhaps the best possible program for the education of information professions at this time does consist of components from schools of business, communication, education, science and engineering as well as computer science and librarianship. Any such configuration could rob library schools of their identity and autonomy but may be a more responsible use of the total resources of an educational institution. Establishing the academic responsibilities of each component in such a merger will be the challenge. Regardless of the name of the school or of the degree granted, the important thing is to provide the best possible education for information professionals for the future. No one alternative is the best model; rather we will see pluralistic and diversified approaches in the years to come, a welcome and positive movement in higher education.[7]

ON STUDENTS AND ADMISSIONS

It seems logical to consider the requirements for admission to graduate education in librarianship and information science for the future. Trachtenberg, although a believer in the rich future of institutions of higher education and their "magnetic" attraction for intellectuals, at the same time suggests that the future is bleak in higher education with flagship schools existing only for the elite and the rich. He projects a stratification and sharp differentiations of status as the rule for colleges and universities which no longer provide incentives for poor or less able students to attend.[8] One of the essential requirements for admission to higher education will continue to be intellectual ability demonstrated through successful academic undergraduate record; and standards will be made even higher, particularly for the young undergraduate applicant. In addition, I would like to see greater commitment in candidates for the profession, one that is less generalistic in nature and more revealing of knowledge of the role and responsibility of the profession they seek to enter. With appropriate information and careful counseling, it should be possible for candidates to make career decisions that are consciously chosen and based on informed knowledge.

In the advisement process educators have a moral

responsibility to engage in a dialogue that may enable the prospective candidate to select the best possible program for that person's declared intention in the profession. I am speaking here of what I call a Position Profile which would be an attempt to match a career pattern, including movement upwards within that career, with both general and specific requirements of the profession. Thus, if a student wants to work in academic librarianship, a position profile for that area of librarianship (and there could be seven or eight of these) would be used to guide the student in planning educational experiences.

I believe that career decisions should be made before entering a graduate library school but, at the same time, recognize that there is a potential for any person entering our field to move to another library or information science profession or leave the field entirely for any number of reasons. I am conscious of the need to recognize alternative career paths over time, of which librarianship is only one opportunity. The concept of multiple careers in a lifetime is obviously part of what we will continue to see in the future. Just as we have students directly from undergraduate programs, so too we will continue to have students who have left other careers and seek the education to embark in this field. The requirements may be somewhat different, but essentially they will have much in common. It may be necessary to weigh life experience (not by years, but by solid life and practical business experience) over previous educational achievement. I do not mean to imply by this a lessening of standards for admission of older candidates but a more sane approach to the valuing of maturing intellectual development and the previously developed competencies of an individual.

Separate admission requirements may also need to be established for those who elect to participate in a particular part of our graduate school offerings rather than completing an entire program. For example, a business corporation may elect to send its employees for particular series of courses or workshop content. This may require a more efficient and immediate admissions process with entry determined by the sending agent and payment made by the employer. It is the type of educational paradigm that recognizes the obligation to consistently upgrade personnel in practice without pretension at anything more than reaching a specific set of practical objectives. In some cases we will be teaching a set of skills that permit a better job to be done in a specific desired context; in others we might

bring together personnel from practice to address a series of difficult problems. In the latter instance we may use theory as the basis of discussion and the resolution may be dependent on the application of principles derived from theory.

Another category of candidates for education may be students in other areas or disciplines who might find some modules of our content useful and applicable to their educational programs. This might be more than the usual cross registration that we now practice; rather it would be a concerted effort to recruit students with the specific objective of offering intellectual content, and/or training in a specific set of conceptual skills. Here we may have to set another list of requirements for admission that more realistically approach the requirements for success in a specific course. All of the above suggestions may have been tried in one or more institutions, and they sometimes become an administrative nightmare. Part of this problem could be solved with computer software available to efficiently monitor such multiple alternatives in admissions patterns.

Another area that might be looked at with some interest is that of undergraduate education. With both Drexel and Pittsburgh Library and Information Schools designing and implementing information science programs for this constituency, it may be a viable alternative for students and a practical path for educators. This is wise foresight on the part of these schools; students in undergraduate and even high school programs will eventually be highly skilled in computer technology when ready for career decisions. Programs that offer them opportunities to engage those competencies and increase their knowledge will be prime targets for their interests. Admissions requirements for undergraduates would be primarily those of the parent institution, but library and information science educators might attempt to have input in the decision process and thus indirectly effect standards for admission to graduate professional schools.

ON ACCREDITATION, CERTIFICATION AND CONTINUING EDUCATION

The accreditation process is linked to standards and the nature of standards often leads to the assumption that they must be broad enough to encompass general offerings

and the majority of programs. There have been repeated calls for a revision of standards that will require more stringent qualitative assessment than at present. The greatest danger in standards is that they are misused as a weapon to prevent any change in the status quo or as a means to enforce conformity. Standards should never be detrimental to progress. We need to develop standards for general functions and mission but we also need specific standards for specific types of programs. We might do well to build upon the work of the various ALA units and divisions which have developed standards and guidelines for professionals in their areas of specialization. There is no doubt in my mind that cooperative contracts with these and other associations must be developed quickly and efficiently to offer a unified and stronger front in accreditation excellence.[9]

A great deal of energy has been expended on the question of the length of the basic graduate program in library education. I believe that the value of such a program is less dependent upon time spent than upon the nature of that program. I discussed this several years ago and still feel that we are in the same position as at the time of that conference.[10]

If accreditation standards need to be improved, so too does our scrutiny of certification requirements. Others have written at length about licensing and national testing, but to date there has been little positive movement. As a field we seem to accept and tolerate a large measure of rank incompetence in practice. In order to correct this situation, we will need to establish cooperative ventures with professionals in practice. Certainly, the models offered by medicine and law are worthy of our attention. Perhaps we should set up a variety of models, similar to internship and residency, to measure performance in the actual world of professional work prior to permanent certification. In addition to law, medicine and teacher education, we might examine our own long-established Library of Congress Internship Program for its contribution to this aspect of professional education.

We must also acknowledge that certification is not the end of professional education. Too often continuing education has been perceived of only as a remediation process or as an upgrading of skills. Although these goals are acceptable and indeed admirable, continuing education is also more than this. In order to respond to *A Nation at Risk* and its mandate for excellence, particularly in the context

of lifelong learning, library and information science professionals must perceive their careers as constant and consistent learning processes. The mind set this involves requires us to look at what might be possible for the future rather than always basing expectations on minor alterations of past performance. The library and information science educational institution should be able to offer a variety of opportunities to the professional community that are on the cutting edge of change and place the clients of such courses in a leadership posture. Many of the continuing education responses should be institution-specific particularly at the decision-making levels, wherein practicing professionals could sharpen intellectual capabilities directly beneficial to their positions. On the other hand, we should recognize that continuing education offerings initiated by graduate schools may also be appropriate for other professionals in business and industry and market these offerings to generate additional dollars. Here, I clearly mean that we may educate some students who are not library and information science professionals but who seek a tangible portion of relevant curriculum for their own professional objectives. For too long we have developed a pattern of thinking in terms of a degree granting concept with an occasional credit/noncredit workshop; we need to conceive of much more diversity in what various aspects of our programs may offer to potential students. Such versatility may mean greater excitement in teaching and substantial financial income to the host institution. It is also true that the various components of graduate education need not be tied to the traditional quarter or semester 3-credit course. We need to conceive of professionals in library and information science as requiring a career-long pattern of continuing education and explore, in collaboration with our colleagues in practice, what the needs are and how best to continue to meet those needs.

ON FACULTY

One of the most difficult segments of this paper to write has been that discussing faculty. After over twenty years in library education, I find that my views are mellowing and my recognition that human beings are, after all, quite human is more pronounced. I still have no patience with those who hold positions as faculty members and do not do their jobs. I feel morally enraged when I see laziness and incompetence in the classroom and the

university. I am always hopeful that the wonder of being a teacher, and a vision of the profession with all its power and purpose will serve as a universal base for all who share this mission with me.

Faculty should be at least up-to-date in their fields if not on the forefront of knowledge. This presupposes some type of involvement in the profession, whether it be through research, consultantships, writing, or professional associations, to explore new ideas and exchange views that may lead to educational change. Bolster has offered a rather succinct presentation on the generation of knowledge in education.[11] This might be usefully contrasted with Gage's work in examining a variety of research approaches in teaching. I note with interest the Gage analysis of the Process-Product paradigm and suggest it might be a useful approach in research in library and information science.[12] In addition to keeping current with content in the field, faculty should be alert to teaching strategies that permit students to achieve objectives more efficiently. The need to discuss in some detail the variety of teaching strategies that might be invoked to achieve a given teaching goal is ordinarily not a highly respected activity in library schools. Unfortunately, faculty members frequently do not find such discussion of interest; many rank it as unimportant if they give it any thought at all. Detailed and conscious design of how, as well as what, we teach is overlooked or ignored. With all the research on teaching, as well as new possibilities through technology, we ought to consider this question with some seriousness. I have never encountered a conference in library education devoted solely to teaching strategies, and I only wish there was one. An interesting article concerning consultation on teaching in higher education contains some insights that may lead to more appropriate determinations of what takes place both inside and outside the classroom.[13] The authors are concerned with intense discussion with each faculty member as the key to increased ability in course design and implementation. Faculty should also develop a sense and sensitivity to when old courses should die and new ones should emerge. This careful attention to what is educationally needed and practically sound is an essential requirement. It also presupposes that faculty can change to adjust to such needs.

Faculty need to be willing to acquire the newer competencies that a high tech society demands. This may mean personal effort and expense but it should also mean that

universities provide additional monies and opportunities for continuing education and re-training. In this discussion of faculty, it is essential to consider both salaries and the career paths of younger members of the profession. We must increase salaries in order to justify what we are asking of the personnel involved. In addition, we need to assure positions for younger faculty who are critical to the intellectual and professional lives of senior faculty and to the entire educational endeavor. A faculty needs the mental exchange that the "young turk" provides to the elder statesperson. Without this the chances of atrophy are increased dramatically. If beginning salaries cannot entice the young and enable them to stay in teaching, the profession will continue to be at risk.

Faculty need to be confident and take pride in their career choices and not perceive such choice as a second-rate decision. I find it interesting, in asking faculty what they do in academe, to discover that many in our profession choose to label themselves social scientists, policy analysts, literary scholars, and so forth; too few seem to be proud to say, "I am a library educator!"

ON DEANS

The role and responsibility of a Dean is a difficult one, and increasingly we are witnessing the lack of qualified candidates to assume that role. The management of any endeavor in higher education is no longer a one-dimensional operation; rather it requires the skill of a given administrator to negotiate the managerial process while defending and implementing the declared educational mission of the school. Deans should demonstrate the ability to exercise leadership as well as competence in entrepreneurial skills. The ability to raise monies, seek out new avenues for recruitment of both faculty and students, while acknowledging the internal politics and survival techniques of the parent institution and to be a sensitive leader of persons is no mean task for any individual. Deans, like faculty, may be either very good or really bad. Some lack interest in what they should be committed to do; others lack the vision and ability; both probably reflect this disinterest and incompetence in the ways they govern their schools. Others lack the ability to compete at the appropriate levels of political warfare within a university community. Faculty and surely higher university

administrators are becoming less willing to accept the customary pattern of a more or less benign autocracy. Although faculty are often angered by the thought of a manager, not a scholar, in the Dean's chair since such a person seems out of context in the gestalt of the university; they eventually yield in their opposition. The concept of "managing for excellence" proposed by Balderston recognizes that "the policy of pressure toward excellence has costs and risks, and its pursuit sometimes endangers an institution's survival prospects."[14] Too often Deans are on the level of "managing for survival" or at best "managing for stability," rather than "managing for excellence."

Most graduate schools have moved to a more active involvement of faculty in administrative decisions, but the cost to faculty, and ultimately to the school, is quite high. Little effort is put in at the administrative level to weigh the consequences of faculty time spent in committee and task force activities. Often such use of faculty demonstrates an amateurism in dealing with powerful or sensitive issues, and ultimately such activity may become an excuse for lack of accomplishment in either the classroom or the marketplace. Administrators need to make much more careful judgments about what should, or should not, be decided by committee and then be certain that full and appropriate information is available to committee members. Deans sometimes permit decisions to be made hastily that should be discussed more fully by the faculty. Budgetary concerns and the determination of allocation of monies in relation to potential payoff are often not brought to faculty attention until a decision is made and any questioning or disagreement is considered a negative and argumentative response. Deans need to be skilled in managerial competencies, but, at the same time, they should be versed in the nature of academic vision as well as academic requirements that such a position assumes.

On the one hand, a faculty wants a Dean who is a scholar while, on the other hand, it wants a Dean who will fight for the school and the faculty on the higher levels of administration. The conflict is self-evident. Given the state of library and information science education, I would emphasize the need for Deans with managerial competence because the key to power is in successful communication with higher levels of administration. I believe Deans will have to acquire a new sense of how to use faculty to greater advantage. The ideal Dean will cut out wastes of faculty time and encourage activities that are

either income producing or prestige/status producing, although always with a purposeful move towards greater creativity, contribution to knowledge and service to students. Faculty may not be wildly happy with this type of Dean; many prefer a parental figure whose benign kindness and applause encourages mediocrity and appeases the winds of danger. Perhaps the primary characteristic of a Dean of the future is the ability to reason and to act with logic and versatility as well as with a touch of wisdom and humor.

ON TECHNOLOGY

One very clear lesson from history is that libraries have traditionally been in a laggard position with a new technology; now it is time to take a positive and aggressive stance and to seek out new futures and applications of technology. One of the major concerns I note in all of library and information science education is also true of many other areas of higher education: the "lagging behind syndrome." By definition, we should be on the forefront of knowledge expansion, pushing forth the borders. Yet, in all too many cases within the university, even in some of the hard sciences, we are not able to function on the same levels as peers in business and industry who have access to more sophisticated instruments for accomplishing their objectives. For example, I cannot believe that a faculty member today can function successfully in terms of total impact on education and the profession without access to a personal computer or its equivalent. The advent of the personal computer has a marked influence on the speed with which we will have to alter life styles and the rate at which we will have to accommodate to change. It is relatively easy to determine, in the case of word processing, that writing letters and reports and memos for library operations may be the prime intention. These may be the only uses initially identified, but one should exercise imagination to envision other alternatives that might be possible for a library operation. For example, would the need to publish an article by a staff member be something of interest; would news releases for local newspapers be appropriate; or would evaluative reports on programs and/or staff be produced in a more timely fashion? Obviously, it is essential to know what is to be done with such an investment in hardware and software if the education

of the professionals who are to use this investment is to be of value. More inter- and intra-institutional work will be needed to propose and seek out both exciting uses of technology in practice and such projects as CAMEO and EDUCOM that address faculty needs and provide the technological support systems to accomplish specific tasks.[15]

Although we need to be on the forefront of information technology, we must avoid the too hasty race to include courses in programming, in office of the future technologies, data base searching, and the like, in an effort to survive in the marketplace. The intellectuality of some of these courses is questionable at the very least, although they might be justified at the consumer level. One of the really difficult problems is that we, as a profession, have not adequately discussed and analyzed the essence of such courses. We assume that not to move is backward and to elect to change in such a direction is a giant leap forward. I find, in talking with faculty and in examining articles on new courses, that we often miss the avowed purposes of such course designs. We are easily snowed by jargon and by those who enshroud themselves in the mystical language of high technology. We need to recognize the experiential as a valid part of graduate education, while maintaining our sense of purpose and moving powerfully toward excellence.[16]

THE RESEARCH ENVIRONMENT

For most institutions of higher education the research environment is a significant factor in the raison d'être of the academic community. It is an essential factor in graduate schools as we strive toward the increase of research activity within library and information science education. On the one hand, there are institutions with doctoral programs and thus, automatically, one may assume a research richness. On the other hand, we have institutions without such programs where the challenge to create a research environment is much more difficult. This is not to imply that having a doctoral program ensures research on the part of the faculty nor that faculty in a school without such a program cannot be productive researchers. In fact, there is indication that some faculty in doctoral programs expend so much intellectual energy on student research, that their own personal research may suffer.

Additional factors, such as financial and psychologi-

cal support for faculty committed to research, should be present in the environment. Primarily, the support is administrative, that is to say, the Dean should appropriate necessary monies and services to encourage research activity. This may be in the form of faculty grants, or it may be in the form of equipment, materials, or secretarial and clerical support. It is unconscionable that many Deans have decided that a vulnerable aspect of the budget is research and, therefore, cut monies with the rationale that funding should come from outside granting agencies. This notion acts as a deterrent to research and increases the likelihood that faculty demur from taking on the burdens of such activity. On the other hand, the greatest support may be in the simplest of all roles for a Dean, providing encouragement and enthusiasm as a faculty member embarks upon and completes research. Nothing is more discouraging than the cold and indifferent response of one who is supposed to lead.

Another significant factor is the collegial support from others on the faculty. The need for faculty recognition is critical to success for some people. Often there is opportunity to work with others in a team effort, but at times one must go it alone. The day of the loner in library and information science education should be over--we are more than ever in need of mutual exchange of ideas and assistance whether engaged in individual or team research. If our own institutions do not serve as the focal point for this kind of exchange, we must reach out to other institutions and colleagues. Certainly, it is common in empirical research for one to be helped by dialogue and the interaction among peers and we should encourage this in our field as well.

It is absolutely essential that we as faculty should seek out cooperative projects with colleagues in practice which could offer to the profession a combination of wisdom from two dimensions, that of theory and that of practice. Research institutions need to be more involved in research activities in practice. The cooperative research project that involves both library staff and library faculty from the first stages of design through completion of the project should be more frequent than any evidence demonstrates. Such mutually beneficial activity has been prevented by a reciprocal distrust and a tenacious protection of turfs. The problem of bringing the two sides together is not an easily solved one. The very ingrown nature of the library and information science educational

community nurtures the sense of other educators as our colleagues and often prohibits us from seeing the professional practicing community in a similar light. Cooperative research requires an up-to-date faculty with a clear sense of practical concerns as well as practitioners who are able to use more theoretical ideas on the cutting edge of practice. Each has something to offer the other. Faculty members can offer focus on a research task without the diverse demands of practice while practitioners can assure that the research will actually enhance that practice. What is essential is that care be exercised to assure that both personal and professional benefits are fairly and equitably distributed among the individuals as well as the institutions involved. For instance, articles should be submitted with joint authorship indicating all those who contributed to the work no matter who actually writes the document, a common practice in the hard sciences.

I would add to this the need to cooperate and seek connections with members of the larger university community.[17] In addition, working with colleagues in allied fields may indeed be a means of successful research involvement.[18] All of this rests on a personal theory that being a teacher includes the obligation to be a sharer; of ideas, of viewpoints, of commitments.

For those outside the empirical domain of research, it is important that we provide the forum for discussion and the needed exchange of views to make such contributions both rigorous and dynamic. It does not seem reasonable to have faculty isolated in their offices or homes working on projects that are carefully guarded and often unnecessarily prolonged when this work might be enlivened and enriched by openness and exchange. Perhaps the greatest lesson to be learned in research is that of sharing. The end product of research is to be shared and so should the process as it develops. Hostile criticism from others should not lessen the commitment of an individual but rather should confirm the intent. Nor should we permit the forcing of anyone into a mold of "the one true type of research"--this does not exist. It is in the marketplace that research should be tested--how applicable is the finding to the furtherance of our profession? None of this is new--but perhaps it needs to be reiterated to sharpen our awareness of a need that is increasingly important in library and information science.

Some of the simplest things, for instance, the availability of small and large scale computer facilities, make

research activity possible. For many pieces of research the personal computer may be the answer with the appropriate software to accomplish the data processing needed. Increasingly, universities are considering alternative configurations for faculty use, including the concept of the "scholar work-station." If a researcher is able to access large data bases, statistical packages and the holdings of a major research library from a personal computer in one's own home or office, many tasks are made easier and more convenient. If word processing of a fairly sophisticated level is available, text writing/editing will be easier. It is implicit in these statements that two things are needed, (1) the training of the faculty to use such software and (2) the convenient availability of the software and hardware. To assume that all faculty can make use of an identical approach to acquiring particular technical competencies is erroneous, and often a faculty member may acquire a skill but have no conceptual basis upon which to design a teaching unit or use that skill in research. We will need alternative configurations for training as well as research activities and these will cost money; but this is an investment that will be significant in the payoff for the future. Many universities offer plans for faculty to purchase computer equipment for personal use at reduced rates. Library educators do not seem to be taking advantage of this opportunity as rapidly as we should and thus are missing out on one of the most exciting exchanges in many colleges and universities, that is, the sharing of ideas and information through electronic bulletin boards.

The use of electronic communications may be a boon in the research of the future, enabling scholars to share and manipulate data over great distances. It could also be the means of involving practitioners and academics in joint projects. It will provide opportunities for obtaining rapid and decisive responses to queries of significance. For instance, if ALANET succeeds, it has the potential of tying together the library and information science community in a unique and immediate fashion. We may lose the insularity that is so steadfast in the library community, and we may increase productivity in service to clientele. In teaching it may be both possible and feasible to ask one or more persons in job sites how they might handle a particular situation while, at the same time, exploring with students in a classroom the reasoning of these persons and other alternatives that might also have been examined.

I also envision the possibility of research in teaching--

the examination of the ways and means that might prove most effective for teaching content and for the continuing education of those already familiar with the concepts and content of our field. The development of new courses and the redesign of old courses should encourage a research component that tests the validity of some of our teaching ideas. Research into our own work as educators is clearly a priority if we are to improve the profession.

ON COOPERATIVE EFFORTS

Much is being written about the need, and even the obligation, for cooperation with business and industry in educational endeavors. The concept of partnership is indeed an interesting one that may or may not lead to damage of the ideals of the university. If we thought intervention by the federal government was dreadful, just think of the potential interference of business and industry in academe. Yet, with appropriate safeguards, such cooperation may lead to mutual benefit and increase the capability of both the corporate and university communities. IBM, for example, has chosen to work in cooperation with a number of institutions in order to increase research and production.

We in the information business may be able to work out arrangements with corporations to offer needed components in staff education and/or training with greater ease than might be thought possible. For instance, most technical and automated systems traditional to our field have something to offer corporate agencies. Library educators may also gain from the increase of activity following the passage of the APPLE bill and other such measures that will enhance the resources and capability of the university. Roy Gavert suggests the need for establishing more "formalized agendas of cooperation,"[19] which may imply the development of a legal contract between the cooperating institutions. Some institutions already involved in cooperative ventures are Harvard and DuPont, Columbia and IBM and Carnegie Mellon and Westinghouse. The research base is the bedrock for such cooperative ventures, aiding the development of knowledge of value to both the academic and business communities.

Global Stakes makes some of these same points asking the professional and educational communities to deal with a critical problem; the future competitive nature of the United States in both the creative and product markets

and the lack of educated information professionals to accomplish these tasks.[20]

ON FUNDING

Fund raising is a critical aspect of higher education for the future. Library and information science education is not immune to this responsibility and must seek out avenues of a broader-based approach. This may mean involvement with a university-wide development office or it may mean sacrificing a more traditional position to obtain a fundraiser. We need to look beyond the typical role of a Dean as a fund raiser; that is to say, one who raises monies primarily through grants. We must continue to obtain grants for both students and faculty support, but we need innovative measures that seek out other R & D resources while also accepting a Market Research approach. This latter concept will involve some serious cooperation between faculty and business to achieve mutually beneficial goals. We need the ability as faculty to arrange with vendors for particular tools and equipment that will benefit the environment for research and/or practice. What is needed is an overall vision allowing for a wide variety of fundraising opportunities and relationships.

ON CURRICULAR PLANNING

It is important to keep in mind the need to break out of our traditional institutional settings to think about what will be needed in the education of the information professionals of the future. This presupposes that we brainstorm in terms of myriad possibilities rather than within the containment of what we now see. We are too often prone to revisions of what is and not the adoption of new and exciting directions. We need to accept and be able to distinguish among three distinct aspects of program in our analysis. The intellectual/conceptual level of our design must be paramount in our thought processes; this explores the organization of knowledge, the structure of communication, the theoretical bases of information science and librarianship and the teaching theory that may be pertinent to any or all of the above. It presupposes a teacher-controlled learning mode, that is, it is the teacher who selects and structures the content to be learned and plans strategies

to accomplish that learning. The second level is that of the knowledge of tools; that is to say, the exploration of "the what" and "the how" of the apparatus of our profession. The teacher will help students identify a variety of tools and provide some guidance for use, but basically this aspect of learning is student-controlled. The third part of our learning triad is the training or practice segment to be planned cooperatively with library educators and other professionals outside the basic educating institution. One part of this may be the already established field work or internship which offers an opportunity for general practice of all that has been learned. The major difference is that the basic supervisory responsibility would be with the field professional rather than with the university professor. Field work is a very costly practice for faculty and the field-site supervisor but is usually well received by students. The supervisor in the field site who is also a clinical professor is the most appropriate professional to be responsible for this component of the educational program. This is one type of cooperation between practice and teaching that has worked successfully; however, it needs further exploration to consider more fully the possibilities of such work.

Herbert White suggests moving a distinct segment of our educational mission to an area of training to be defined in specific competencies identified and required by practice.[21] This is a valid means for continuing education design but requires a more realistic approach to getting through the administrative and educational red-tape involved in the approval of programs. It also presupposes that we can clearly define training. I would argue with White that training is not a lesser factor, just a different one, in the holistic education of a professional. Those who can think but are unable to translate ideas into action are no more useful to the profession than those who act without thinking. It is when faculty cannot tell that difference that we are in trouble and headed toward a mediocrity in education.

Another part of this segment has to do with system-specific training such as that required for the effective use of a particular data base. In this, we might make use of the first rate training programs offered through vendors. Why should library schools invest faculty time and energies in the teaching of data bases in a system-specific mode? Why not engage Dialog, BRS, The Source, CompuServe and others to do the job for us? Certainly it would

be advantageous for them to do this, and the arrangement would provide a currency impossible if the library educator attempted to keep up with the latest in each of the systems.

Another example of such cooperation might be the co-teaching of a problems or issues course in the actual situation or field site. The concept of moving students out of the academic environment is an exciting one. This might also be accomplished, in part at least, through electronic teaching, that is, using teleconferencing and electronic mail as a means to achieve educational objectives. Essentially we need to spend more time as a faculty in discussion and analysis of the curricula. We need to think in terms of the professional justifications of the educational experiences of students both in the classroom and in outside assignments and activities provided for them.

ON ALTERNATIVE CURRICULA SCENARIOS IN LIBRARY AND INFORMATION SCIENCE EDUCATION

Given the current technological environment, the recognition that we are a post-industrial society in the midst of what has been labelled the knowledge revolution, it is incumbent upon library and information science educators to consider a radical change in the nature and the focus of the curricula.[22] The approach used in this paper is to suggest several models of curricula that reflect emphasis on, respectively: the human being as an end-user, the process, the product or the specialty. I do not proclaim that one is superior to another but rather that they are different. Each model raises questions for faculty and administrators to explore and either accept or reject. At the very least they should function as catalysts for action. The fact that no one school can provide strong programs in each of these (and other, as yet undescribed, areas) is not indicative of a view that one kind of emphasis is more important than the others. Rather we must begin to look at the profession more globally as a community of educating institutions, each concentrating on the particular area in which excellence can be assured.

END-USER SCENARIO

One curriculum scenario emphasizes the human encounter and is focused on the end-user and "the profes-

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sional's role in encouraging life-long learning." This scenario is predicated upon the rapid increase of alternative systems or avenues to information and the increased need for facilitators in information negotiation. The primary purpose of such a curriculum would be to focus on the end-user with all courses developed to accommodate the personal and aesthetic, as well as the intellectual, needs of those end-users. Professionals in such a course of study would explore learning theory, including the nature of communication in all formats, in order to recognize and address the needs of various clienteles. Courses would be designed to increase alternative approaches to data banks, recognizing both the concrete and abstract learning/reasoning styles used by different clients. They would permit students to explore a variety of means to instruct and to assist the user in functioning successfully in any machine and/or non-machine learning environment. Courses that increase ability in decision-making and that force the student into alternative approaches to problem-solving would be required. The student in such a program would consistently consider work with end-users and select from course offerings those components that prepare for such responsibilities. We have moved in practice from library lessons, to bibliographic instruction and now we need to leap forward into a newer vision of *information negotiation instruction*. The student in this end-user configuration will also need to acquire competency in the structure of information as revealed through a multitude of channels and telecommunications devices. Perhaps an amalgamation of cataloging, classification and automated systems with reference structures from traditional library education programs along with communication and learning theory might form the basis of such a course of study. Indeed a student in such a program may not be trained in specific cataloging skills but could be educated in the structure and rules of such systems. Another aspect of this curriculum would be the development of competence in particular areas of communication, that is to say, the ability to work with an end-user in developing critical skills in reading, viewing and listening. This may presuppose the acceptance of a model based, in part, on older courses such as children's literature, wherein the content of the course included literary theory, literary criticism and the actual application of such theories to works in the field. Such a model would permit a greater inter-activeness with end-users, particularly increasing the skills of professionals who would work

with those seeking advice and an exchange of views. Of course, this advice and exchange of views need not be only in respect to the kind of information processing that has been in the forefront of most professional discussions in recent years. End users may be simply readers or viewers seeking assistance in selecting materials purely for their own personal pleasure. A traditional function of librarianship, that of bringing readers and books together, must not be forgotten in our rush to be leaders in the information society, and students in this program must learn to interact effectively in this role.

Among the questions that I would raise about this scenario are:

What is the relationship of exposure to alternative teaching strategies to student efficiency in working with users?

To what extent should we concentrate on personal and/or learning characteristics in our definitions of end-users?

What percentage of classroom time should be devoted to telecommunications and projections for access to information through satellites and other technological means?

If we posit a life-long-learning frame of reference, what competencies will be needed in spanning a variety of age/ability levels in clientele?

Should reference courses, as we have traditionally perceived them, continue to be taught?

How can we best educate students who, in turn, will be able to teach information negotiation to others?

PROCESS SCENARIO: MANAGEMENT OF INFORMATION

Another scenario that must be examined in looking at the future is that of a curricular focus on "management of information" which places emphasis on the process or functions aspects. This curriculum configuration would require the development of courses that focus on the critical abilities needed by an administrator or manager. Courses in human factors and personnel problems are essential, especially as new technologies take over some traditional tasks and displace some of our most experienced and valued professionals. Financial management that makes use of alterna-

tive technological approaches such as spreadsheets and "what if" planning devices is also critical. Development of courses in change theory and in the consideration of solutions to specific types of problems might prove beneficial. A key component would be the design of courses that employ a team approach, perhaps a team of faculty members and the staff of a library institution or a business enterprise. The dialogue that follows might combine the strengths of theory and practice while eliminating the obvious flaws of both. Of course, this implies a real cooperative venture with team planning and open discussion rather than a series of individual presentations. The danger of many administration and management courses is that they often are lectures describing either theories and/or practices that are in the mind of the teacher "right" or, at least, "acceptable." Much of real-life management is based in the problem mode that rejects this concept of a "right" or "unique" solution because there are too many conflicting conditions in the environment, and action often must be taken without adequate time for a thorough analysis of alternatives. Teaching might take this into account by providing both a sound theoretical base for decision-making and opportunities for using that theory in judgments that approximate practice.

New developments in software are appearing so quickly that a major concern in information management is adjustment to those changes. For the most part, we are educating people for and with both hardware and software technologies that are rapidly becoming, if not already, obsolete. As educators we must look at situations such as one in which a corporate official can query a data base system in natural language and obtain desired results without the intervention of an information professional. What this means for library and information professionals in the corporate setting is certainly a question to be raised in the education of those in an information management program.

The capability evident with languages such as Express and the potentials obvious in research in artificial intelligence cannot be ignored in our graduate programs. We cannot wait for Robotics to emerge (One can envision the little darlings, one programmed for LC and the other for Dewey, gliding up and down library aisles, shelving books and retrieving journals) but rather must include in our preparation of managers the ability to brainstorm on future technologies that may impact the field.

Just as Hayes suggests that accounting is an essential

skill for a professional, so I would suggest that writing reports and documents is equally important.[23] Most managers must have the skill necessary to prepare efficient and implementable reports. This is not a competence to be assumed from undergraduate education; rather it is the ability to efficiently use time and resources to communicate action recommendations that demonstrate professional insight, intelligence and a sense of history. Educational offerings should include research competence, primarily in the reading, analysis and assessment of research in our own fields but equally the ability to read and assess research from allied fields. If we educate to examine in a consistent fashion the research reports generated from a given discipline or from a given agency (Rand, Hoover, Westinghouse, Bell Labs), we may increase our capability to analyze and evaluate their appropriateness for our operations. The ability to design and conduct research, however, is not easily acquired; one needs clear delineation of what should and should not be done in research activities. Having supervised the research of numerous doctoral candidates and recognizing their struggles and problems in this initiation rite, I fear for the sloppy and cavalier attitude such notions as unrestricted research might include. We must be able to define what is acceptable research without necessarily requiring the research credentials implied by the doctoral degree. The danger in the demand for more research is that we may encourage research that lacks rigor and thus is, in the end, destructive. The wanton demand for research could be likened to the classic assignment of term papers--often a considerable waste of everyone's energy because they are poorly designed and directed and sufficient time is not allocated for the production of an acceptable product. The recognition of the difference between this activity and truly valid and useful research is the critical factor.

A danger in developing a program in management is that of depending too much on one's own past practice. Teaching based on experience is obviously a positive and commendable phenomenon, but the missing element is the knowledge that is larger than experience and practice--the ability to extrapolate from that practice those ideas and concepts that are of more universal applicability.[24] It is the responsibility of the professional educator to create knowledge that will advance the field rather than to depend upon only that which served us in the past.

What theoretical bases are most appropriate for extrapolation in library settings? How might we best use these theories or models?
What competencies are needed in order to teach the content of such a curriculum? How might these efficiently be acquired?
What integrated software will enhance our capabilities in management? How will this software be used effectively in teaching?
Should students study failure as well as success in institutions as a source for deriving principles or adjusting practices? How can this process be taught?
What tests and teaching strategies might increase thinking and logical skills in potential decision-makers? How might we use these to advantage in educating our students?

PRODUCT SCENARIO: TECHNICAL AUTOMATED INFORMATION SCIENCE

One might adopt a third scenario that is totally given over to "technical, automated information science." This would place the focus on product. One must perceive, however, of the product as ideas that are organized in a variety of intelligible systems. Such a focus would combine all of cataloging, information science and reference components into one curriculum. Less emphasis would be placed on basic skills in cataloging except for those few who seek employment with major data bases and/or utilities requiring this competence. Original cataloging problems requiring specialized abilities and solutions would be the foci of these courses. This concept presupposes the distinction between copy cataloging and original cataloging, and the acceptance of an educational mandate to concentrate on the development of original catalogers who will also supervise copy catalogers. Here the stress of the curriculum would be on educating professionals who can design, develop and use systems for the organization of knowledge. Courses that permit the intense use of experiential data as the basis for change would be introduced. Quasi-experimental research would be designed to reveal the functional use of knowledge by clients. Principles of data base use would

be explored while, at the same time, students might have a variety of specific data base searching skills offered in the program. Some courses might be designed to explore the user problems in approaching and using automated systems; others would concern themselves with design and development of documentation for systems. Such a curriculum would also include those courses that explore the nature of information structures such as indexing, abstracting, and data flow analysis, making use of content normally included in information science. The increased need for indexing abilities as well as abstracting competencies should be self-evident. Given the potential of fifth generation computers, course content could include exploration of the "what" and the "how" of principles/rules that might form the baseline for the computerized organization of knowledge. Obviously, the work in artificial intelligence will influence our field and the nature of our involvement in this area must increase. One of the problems is that the major research is not in schools of library and information science, but rather in other parts of the university. We must move out aggressively to seek direct involvement with our academic colleagues working in this research domain to cooperate and indicate what we might offer as well as what we hope to gain in mutual activity.

It is probably in this scenario that one might increase work in preservation and conservation of resources, although this area may ultimately be best approached through a single, highly specialized program such as the model provided at Columbia.

Among the questions to be answered in relation to this curricular analysis are the following:

Is there a danger in teaching students the advantages/disadvantages of one online system over another rather than letting them explore and determine what the factors of significance might be in a decision on selecting an online system?

How does one explore in the classroom the time lag from changes in socially-charged language to library alterations of terminology and why might one do this? Given the potential of contemporary communications may we anticipate a radical shift in our approaches to this problem?

Will the natural language movement in computer soft-

ware alter our translations of the organization of knowledge?

How does one teach the historical valuing of technical standards in high technology industries such as computers and telecommunications, that abhor such standards for competitive reasons?

Given the movement in analysis of online searching revealed in Fenichel to Fidel & Soergel what new approaches might we teach and explore with students to address future directions?[25]

To what extent should we be developing means of acceptance testing for the variety of full scale library systems in our courses?

To what extent should we extrapolate from failures in automation with our students?

How do the total technological environment and the study of ergonomics influence library and information science education?

To what extent should expert-system research be explored as it might effect the classification and cataloging of knowledge?

SPECIALTY SCENARIO: SCHOOL LIBRARY MEDIA EDUCATION

A fourth scenario concerns the education of school library media specialists. Although my proposal may be unacceptable to many, I would move all educational responsibility for this profession to schools of education. Recognizing that all others who work in schools (including physical education teachers, art and music teachers, school nurses and school psychologists as well as administrators) are educated in schools of education, is it not illogical to isolate school library media specialists as the only members of the educational community exempted from this pattern? It is time to change that and to recognize the need to do so rapidly. The move towards managerial competence for school librarians was revisionary but is no longer viable as an excuse to keep such programs within library schools. Managerial skills can be obtained in schools of education just as easily and perhaps more appropriately.

School librarianship need not start at the graduate level--any more than teaching does--but I insist that growth is dependent upon continued education throughout

one's career. Undergraduate preparation for school librarianship is natural and needs encouragement and, as Vandergrift has stated,

> The profession might encourage undergraduate schools to offer programs leading to a provisional certification and then develop graduate programs through which media specialists can not only earn an advanced level of certification but can truly specialize within the field.[26]

School library media specialists are properly a part of schooling and their allegiance should be primarily in education. I do not perceive this as a statement of lesser quality for this area but rather a recognition of the beginnings of a career path. In fact, there may be parallels for other areas of librarianship as well. It is true, however, that one of the major problems in working such a radical change is the status-driven nature of the profession.

The answers to the questions I would pose in this scenario may be helpful in determining whether these programs are most appropriately offered in library and information schools or in schools of education.

What traditional library/information science knowledge and skills do school media specialists need to acquire?[27]

To what extent should we design programs that include major components in curriculum design and educational theory? If we do include such components, how do we fit these into a comprehensive program for school library media specialists?

To what extent should we insist that the teaching of children's literature be within the framework of literary theory and criticism as well as of reading theory? How will we accomplish this in our teaching?

To what extent should we teach prospective school library media specialists strategies of teaching and how might this be done?

How might we explore new and creative means to deal with the various search strategies used by elementary and secondary school students?

What is the nature of media competence for the school library media specialist of tomorrow? How will we meet this need?

Obviously, the school library media specialist is but one of many specializations we will have to sort out and determine places for in the future. It is used as a model since it represents one of the unique areas where somewhat clearer lines may be drawn. Another area that provides an alternative approach within these scenarios or models is that of the rare book field. By definition, this area of librarianship is narrow with a limited range of potential career opportunities. There is no question in my mind that this country only needs one such program and that students interested in that aspect of librarianship should elect that particular program. Providing a course here and there is a waste of resources and not justifiable. The area of archives and oral history would also fall under the category of specialized and, to some degree, "one of a kind" programs. It is logical to assume that some schools will develop these highly specialized programs, and it should be equally clear that other schools should not try to replicate this activity. We seem to forget that this is one of the most mobile student bodies in history--students will go where the offerings are available. ALA and other associations have a responsibility to identify specializations within schools rather than just providing a pallid list of accredited schools. Without this kind of detailed information, advisement and counseling for potential library and information science students is impossible. Although the grapevine is useful, I do not believe that it is a totally valid or reliable source of information in this marketplace.

Obviously I have not composed scenarios for every aspect of library and information science education. One concern of significance that I have mixed views about is international librarianship. I see this as an aspect of our concern but not as a dominant factor in our educational decisions. Like most highly specialized programs, I would suggest that course work in international librarianship be only at the advanced level of doctoral work with foreign students admitted to masters level programs and acquiring their first degree in one of the programs described in the other scenarios.

Other library educators would propose very different scenarios for library and information science professionals today, and certainly all of us will need to reconsider alternatives and design new scenarios for the future. If *A Nation at Risk* has the impact on secondary education that is proposed, all aspects of college and university educa-

tion will need corresponding alterations. The lifelong learning society aspired to in this document will require a new vision and new purposes for the education of information professionals capable of enhancing the learning power of all Americans.

CONCLUSION

Studs Terkel characterizes his book *Working* this way:

> It is about a search . . . for daily meaning as well as daily bread, for recognition as well as cash, for astonishment rather than torpor, in short, for a sort of life rather than a Monday through Friday sort of dying [28]

When asked to write about library and information science education, so many images, ideas and instances came to mind. I sat in my office and thought of all the wealth of abstractions and theoretically-based knowledge about the profession and, at the same time, I was reminded of the reality of actual job situations, settings and incidents. As I considered these two facets of the profession, I began to see the bombardment of differing images from both my theoretical position and the actual situations involving specific materials and real people as a rapidly revolving kaleidoscope with ever changing patterns. Having tried to hold particular patterns still in order to examine them throughout this paper, I recognized that, as one holds the kaleidoscope up to whatever light is available and rotates it to change the pattern and shadings, new pieces take prominence and whole new shapes come into focus.

One of the primary pieces is certainly that of knowledge and the valuing of intellectual property, that is, the recognition of the power of expression of an idea in whatever medium chosen. Information, ideas and knowledge are not only the foundation of our profession; they are its content as well. They are the bases on which the entire principle of a free education is based, that is, the valuing of the thought process of each individual. This presupposes the right of unrestricted access to all information and ideas, which is the basic medium in which individual thought and a literate society develops and grows. It is

the information professionals whom we educate who help to make possible the kind of thoughtful, informed citizenry that will demand and participate in life-long learning opportunities.

Another prime component in our kaleidoscope is commitment. We are committed to people and to knowledge, to ideas and intellectual freedom, to information and to the rights of all human beings to that information which keeps us and our profession alive. Equally we are committed to the preservation and the sharing of all forms of aesthetic compositions that bring joy and wonder to others and help keep our work from becoming another of those "Monday through Friday sorts of dying." The commitment that comes with those entering professional education must grow as they participate in a critical examination of ideas and alternative points of view in relation to practice.

A third component in our professional kaleidoscope is that of decision-making. Librarians and other information professionals first need to know but then they also need to act. If our commitment is to be realized in service, we must be competent in our management of libraries and information agencies. This presupposes the acquisition of necessary skills through repeated exposure to problem solving situations, wherein one is asked to weigh alternatives and to provide a rationale for a suggested behavior. If all one wants is the acquisition of information and skills, there are certainly far more efficient means of acquiring that information than I and most of my colleagues in teaching are able to supply. What human beings who are teachers can do, however, is to help students sort out, select, massage and deal with all the information bombarding them from the media and other instructional sources and to use that information in increasingly competent decision-making. In essence then, what professional education values more than the simple acquisition of knowledge is the development of the kind of critical ability which enables students to consider, question and analyze existing information and ideas in the process of developing their own new and innovative contributions. The research environment of which they should be a part is one of constant questioning, one which will encourage them to contribute to the practice of our profession in order to enhance it or even to astonish it.

There is the responsibility in graduate education for students to recognize and expand their own personal potential. To work to capacity and to increase service is a

constantly changing demand because the world itself, therefore the knowledge on which the profession is grounded and the people we serve, are constantly changing.

Like the child, I have taken apart the kaleidoscope and now I will make it whole again. Each of us, thinking and caring educators and human beings, must acknowledge our commitment to our profession as a most prized possession, recognizing our responsibilities and admitting that in a different time and in a different place, various pieces of the kaleidoscope will take prominence. We also recognize that the patterns emerge when pieces move together in harmony. May each of us pick up the kaleidoscope and joyfully explore the profession without fear but with a sureness that we are doing a wondrous thing--we are exercising our own potential as thinking, caring library educators. All of us acting together in this process become the very essence of our profession--one that will bring each of us, in the words of Studs Terkel, meaning, recognition, astonishment, in short--a life!

NOTES

1. An excellent synthesis of this relationship is provided in Gary Sykes, "Contradictions, Ironies, and Promises Unfulfilled: A Contemporary Account of the Status of Teaching." *Phi Delta Kappan* Volume 65, No. 2 [October 1983]: 87-93.

2. *A Nation at Risk: The Imperative for Educational Reform.* A Report of the National Commission on Excellence in Education. Washington, D.C.: U.S. Government Printing Office, April 1983.

3. Harry Judge. *American Graduate Schools of Education.* "A Report to the Ford Foundation" New York: The Ford Foundation, 1982, p. 6.

4. Michael Timpane. "The Future of Schools of Education in Research Universities," Draft Report for Association of Colleges and Schools of Education in State Universities and Land Grant Colleges and Affiliated Private Universities. Minneapolis, October 10, 1983, p. 7.

5. Robert Hayes. "Citation Statistics as a Measure of Faculty Research Productivity," *Journal of Education for Librarianship* Volume 23, No. 3 [Winter 1983]: 151-72.

6. Another view on judging professional excellence is presented by Barbara A. Rice and Tony Stankus. "Publication Quality Indicators for Tenure or Promotion Decisions: What Can the Librarian Ethically Report?" *College and Research Libraries* Volume 44, No. 2 [March 1983]: 173-78.

7. Although Birnbaum's research reveals a decline in the level of institutional diversity, he suggests several steps to both preserve and enhance the future levels of institutional diversity. Robert Birnbaum. *Maintaining Diversity in Higher Education*. San Francisco: Jossey-Bass Publishers, 1983, 149-82.

8. Stephen Joel Trachtenberg. "What Universities Will Be Like in the Year 2000," *Phi Delta Kappan* Volume 64, No. 5 [January 1983]: 327-30.

9. The ALA Committee on Accreditation is developing such a proposal for cooperative efforts among various associations.

10. Jane Anne Hannigan. "The Extended Time Frame: An Analysis and Summation," in *Extended Library Education Programs*. Proceedings of a Conference held at The School of Library Service, Columbia University, March 13-14, 1980, pp. 133-43.

11. Arthur S. Bolster, Jr. "Toward a More Effective Model of Research on Teaching," *Harvard Educational Review* Volume 53, No. 3 [August 1983]: 294-308.

12. N. L. Gage. *The Scientific Basis of the Art of Teaching*. New York: Teachers College Press, 1978.

13. Carol Carrier and others. "Theories of Teaching: Foci for Instructional Improvement Through Consultation," *The Review of Higher Education* Volume 6, No. 3 [Spring 1983]: 195-206.

14. Frederick E. Balderston. *Managing Today's University*. San Francisco: Jossey-Bass Publishers, 1974, p. 268.

15. CAMEO, at Teachers College, Columbia University, is funded through APPLE to explore use of computers in administrative applications. EDUCOM has developed a consortium of educational institutions to cooperatively develop software for educational and business applications.

16. The formal characteristics of rigor, appropriateness and balance described by Jacobs would be a profitable basis for faculty discussion. Frederick Jacobs and Richard Allen, Editors. *Expanding the Missions of Gradu-*

ate and Professional Education. San Francisco: Jossey-Bass, Publishers, 1982.

17. IBM has formed a new unit to serve the advanced computing needs, including research and innovative computer applications, of universities and colleges in the U.S. called Academic Information Systems(ACIS).

18. I have found a clear presentation of this concept in: *Industry/University Research Relations: A Workshop for Faculty*. Proceedings of a workshop presented by the Society of Research Administrators in conjunction with the National Science Foundation, April 11, 1983.

19. Roy V. Gavert. "Business & Academe: An Emerging Partnership," *Change* Volume 15, No. 3 [April 1983]: 24.

20. James Botkin and others. *Global Stakes*. Cambridge, Mass.: Ballinger Publishing Co., 1982.

21. Herbert White. "Defining Basic Competencies," *American Libraries* Volume 14, No. 8 [September 1983]: 519-25.

22. This concept of the knowledge revolution and its impact on higher education is explored in some depth in Bernard S. Sheehan, Editor. *Information Technology: Innovations and Applications*. San Francisco: Jossey-Bass Publishers, 1982.

23. Robert Hayes. "Managerial Accounting in Library and Information Science Education," *Library Quarterly* Volume 53, No. 3 [July 1983]: 340-58.

24. Helpful to this concept would be the work of Frederick Jacobs and Richard Allen, Editors. *Expanding the Missions of Graduate and Professional Education*. San Francisco: Jossey-Bass Publishers, 1982.

25. C. H. Fenichel. "The Process of Searching Online Bibliographic Databases: A Review of Research." *Library Research* Volume 2, No. 2 [Summer 1980-81]: 107-27; Raya Fidel and Dagobert Soergel. "Factors Affecting Online Bibliographic Retrieval: A Conceptual Framework for Research," *Journal of the American Society for Information Science* Volume 34, No. 3 [May 1983]: 163-80.

26. Kay E. Vandergrift. "The Making of a School Librarian," *American Libraries* Volume 9, No. 10 [November 1978]: 606.

27. Additional questions are raised in my article on revision of the standards. Jane Anne Hannigan. "School Media Standards," *Library Trends* Volume 31, No. 1 [Summer 1982]:49-63.

28. Studs Terkel. *Working*. New York: Pantheon, 1974.

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LEARNING AT RISK: SCHOOL LIBRARY MEDIA PROGRAMS IN AN INFORMATION WORLD

By *James W. Liesener*

American education has been described as severely problem stricken in *A Nation at Risk* as well as numerous other studies. The various studies approach the problems from different perspectives and use a wide variety of indicators as evidence of serious problems. As a result, the solutions that are recommended are also varied. However, the consensus appears to be clear that for this country to continue to progress and maintain a competitive position in the global village, significant improvements must be achieved in the educational enterprise.

America has historically expected a great deal of its educational institutions. Every new societal problem becomes a new challenge to at least be partially solved by some addition to the educational mission. In spite of these great and ever growing expectations, the level of resource allocations and the priority and status given to education in this society do not by any means parallel the expectations. It is very interesting in this light to see that the 1982 Gallup Poll referred to in *A Nation at Risk* suggests that people currently view education as the major foundation for the future. This national opinion poll indicated that education is considered "more important than developing the best industrial system or the strongest military force," that "public education should be the top priority for additional federal funds" and that education took first place of the twelve funding categories covered in the survey (National Commission on Excellence, 1983, p. 16-17).

A Nation at Risk very appropriately urges the creation of a "Learning Society" as an effective approach to producing individuals who will be able to function and compete effectively in an information age. For this to occur, the concentration cannot be restricted only to the basic skills but must focus on higher order intellectual skills, for example: analytical, evaluative, inferential, interpretive and problem solving skills, which are neces-

sary to achieve at the levels of sophistication required in the present and future societies.

It is a disappointment to see that in spite of the emphasis on learning and the development of the higher order skills necessary to function and achieve in an information society, so little attention is devoted in *A Nation at Risk* to the units and organizations that specifically deal with information resources and the facilitation of the learning of the information seeking and utilization skills alluded to throughout the report. It is discouraging that, though a behavior pattern of life-long learning is demanded in the report, one of the institutions most associated with and inherently dedicated to nourishing independent and life-long learning, namely libraries, is hardly mentioned in the report. This omission represents one of the major problems faced by school and all kinds of libraries in attempting to perform their educational function. The role of library media programs and their potential for significantly contributing to the solution of information problems must be perceived clearly by clients or their potential will not be realized and others will have to perform the critical information intermediary function.

The objective in this paper is to look at the problems and prospects of school library media programs in contributing to the fostering of life-long learning and the development of the information seeking and utilization skills critical for succeeding in this complex and rapidly changing world. The particular focus in this paper, in contrast to the other papers, is the role of library media programs in the schools and their potential for contributing to the significant improvement being demanded of the schools and all educational institutions in this society.

INFORMATION AND EDUCATION

The Office of Technology Assessment of the U.S. Congress (1982) in its study of the impact of information technology on American education described the information revolution as follows:

> Modern society is undergoing profound technological and social changes brought about by what has been called the information revolution. This revolution is characterized by explosive developments in electronic technologies and by their integration into complex

> information systems that span the globe. The impacts of this revolution affect individuals, institutions and governments--altering what they do, how they do it, and they relate to one another. If individuals are to thrive economically and socially in a world that will be shaped, to a large degree, by these technological developments, they must adapt through education and training. (p. 3)

This report also presents two important basic conclusions regarding education:

1. The so-called *information revolution*, driven by rapid advances in communication and computer technology, is profoundly affecting American education. It is changing the nature of what needs to be learned, who needs to learn it, who will provide it, and how it will be provided and paid for.
2. Information technology can potentially improve and enrich the educational services that traditional educational institutions provide, distribute education and training into new environments such as the home and office, reach new clients such as handicapped or homebound persons, and teach job-related skills in the use of technology. (Office of Technology Assessment, 1982, p. iii)

This same study also concluded that the impact of the information revolution is affecting all institutions but "particularly those such as public schools and libraries that traditionally have borne the major responsibility for providing education and other public information services" (Office of Technology Assessment, 1982, p. 4).

The knowledge and skills required to survive and succeed in the technologically and stress-oriented society and world we presently live in are quite different from those required in less complex times. The development of higher level thinking skills is clearly not achieved by concentrating on a rather limited view of basic skills and on drill and practice. Both teaching and testing have to concentrate on higher level skills as well as on the more basic skills.

Sorry to say, this is currently not the case in many situations. As with the learning of the writing process, the learning of information seeking and utilization skills

and the fostering of higher level intellectual skills is only accomplished through the repeated use and evaluation of these skills in an adequate information laboratory. These kinds of skills are not developed and nourished in a passive lecture/recitation mode. The active and constant opportunity for the application and practice of these skills in an information rich environment with knowledgeable and accessible assistance is a necessity for success. Learners must have full and unencumbered intellectual and physical access to a wide range of quality materials and information services to attain this level of achievement. In addition, we need to nourish the development of an attitude of excitement regarding ideas and an attitude of ease and competence in interacting with the information sources and services that provide access to these ideas.

REALISM AND INFORMATION USE AND USERS

The challenge to teach higher order cognitive and problem solving skills more effectively cannot be responded to successfully with a naive view of information use and users. An overly simplistic view of the information world and information use has dictated our past approaches to the provision of library and information services and the teaching of information seeking skills. The advent of computerized data bases and online searching has forced us to evaluate our understanding of information seeking behavior and some of what we have learned challenges our previous perspectives. At this point, a more realistic and knowledgeable approach to the provision of information services to children and youth is mandated.

Simply "preaching" the wonders and benefits of using libraries in the traditional manner and exhorting users to reform when nothing in the last twenty five years gives us any encouragement that they can or will seems to be a futile and nonproductive exercise. From our limited understanding gained relatively recently of adult information use behavior, serious consideration should be given to a number of factors which appear to be fundamental principles regarding information use. It cannot be asserted at this time that these principles, described in the following paragraphs, have been clearly documented in terms of their applicability to children and youth. Many would feel however that these ideas have at least face validity and there seems to be at least some empirical support in the

research literature for some of these ideas (Mancall & Drott, 1979).

Proximity. As common sense would tend to indicate, there is a very solid relationship between proximity and use. This probably explains why home libraries play a more important role than was originally assumed. Evidently, the greater the distance either physically or psychologically, the less likely it is that a resource will be used whether it is a library or any other kind of resource.

Considerations of Time and Energy. The time and energy required to find and use information is a serious consideration for most people and it appears that less pertinent or adequate information is frequently preferable to the expenditure of more time and effort to get more and/or better information to satisfy a need. Obviously this consideration is relative to a given individual and a particular situation. In terms of expenditure of time and effort, there does seem to be a serious discrepancy between what library media specialists and most library and information professionals feel is reasonable and what clients feel is reasonable.

Amount of Information Needed. Users evidently have a considerably different perception of how much information is "reasonable" to satisfy a particular need than information professionals. It appears that individuals have a certain sense of what is reasonable and that is difficult for information professionals to change. One of the most insightful analyses of these particular issues was done by Patrick Wilson (1977), which he refers to as the "limits of information gathering." In doing an analysis of an individual's available time, it is apparent according to Wilson that the time for information gathering and use is limited and that there are a number of competing factors. The consideration of time needs to be considered from the standpoint of being a valuable commodity and not "free" as we seem to consider it particularly when it comes to children and youth.

Preference for Personal Intermediary. Numerous studies indicate that when confronted with an information problem many individuals' first preference is to consult another person who they know and perceive to be knowledgeable and who will assist them (1) in refining the

question, (2) in screening or presifting the information alternatives, and (3) in some cases, in providing the answer. This strong preference for personal assistance at least in the early stages of an information inquiry needs to be taken into account when planning and developing library and information services.

It would seem that a more productive approach to planning and developing library media programs that have greater prospects of being successful in meeting the needs of students and teachers would be based on a realistic understanding of user behavior. We need to test the validity of a number of these ideas that have come out of the analysis of adult information seeking behavior in terms of their applicability to children and youth. It is strongly suspected that many of the behavior patterns presently recognized in adult information seeking behavior might very well also apply to students at different levels.

In addition to trying to understand the information behavior of youth, it is also critical to recognize the information needs of teachers in a realistic manner. Teachers probably have a greater diversity of information needs than most other categories of users but yet have fewer serious and sophisticated efforts being made to provide them with realistic and effective assistance. This is true at the school level in spite of the valiant efforts of some library media specialists but generally also in terms of district services and commercially available services.

How many sophisticated current awareness services exist for teachers in the various subject areas and grade levels? What proportion of teachers have available to them, in convenient and realistic ways, online searching of appropriate data bases and information intermediaries prepared and willing to provide searching and synthesizing services? What kind of awareness and skills do teachers have in accessing the information world? From all available evidence, the assessment points to an incredibly low level of both awareness and skills. It is true that there are noteworthy exceptions in terms of both the level of service provided teachers in some districts and the level of awareness and skill exhibited by some teachers. However, these cases are definitely in the minority.

Is it possible that (1) our failure to reach a larger proportion of our potential client population and (2) the apparent ineffectiveness of our public relations and instruction in the past could be largely due to the unrealistic expectations of users or at least due to the lack of

understanding of information seeking behavior? Can we afford to ignore the possibilities here?

WHAT ROLE FOR SCHOOL LIBRARY MEDIA PROGRAMS?

It doesn't take much of a perusal of the literature to discover a diverse and rather confused panoply of perceptions of the roles and functions of school library media programs. This confusion and total lack of consensus creates a serious problem in attempting to develop programs. The question at this point is what role is necessary and what functions need to be performed by library media programs considering the view of the information world and the requisite learning needs described previously. The particular problems and issues that arise in trying to develop and sustain what is needed will be dealt with in the next section of the paper.

The older concepts of passive culture repositories or centers for the development of an enjoyment and appreciation for reading good books while identifying very important functions, do not appear to be actively responsive to the entire range of needs identified as crucial for survival and achievement in an extremely complex, information abundant and rapidly changing world.

The level of expectation that is satisfied with a nice and genteel but fairly superfluous resource is no longer relevant or appropriate. The value and utility of information of all kinds has become much more visible and appreciated and it appears that an expectation of a more active and a broader approach to providing information services is developing. It would seem that if we are serious about the learning needs of children in our society, a quantum leap is not only required of what we expect of educational agencies generally but also in terms of what we expect of the sophistication and contribution of such a key ingredient as the information intermediary and information laboratory. The development of higher level intellectual and problem solving skills can only be developed in an environment where they can be repeatedly applied and tested throughout the learner's school experience. The cumulative effect of many of these kinds of experiences is what leads to the development of a self-directed learner able and motivated for lifelong learning. This kind of information learning laboratory requires a level of sophistication

and responsiveness far beyond the current service level of "materials availability" combined with the possibility of some limited assistance.

A great deal of progress has been made in the past decade in providing organized and carefully selected collections. The various federal programs that followed the launching of Sputnik in 1957 provided some of the funds and the stimulation that led to the rapid growth in the 60s and 70s. However, this did not result in a well-stocked library media center in every school or the kind of staffing that could provide the services required to serve the needs even as they were defined during those times. Of course the 80s have seen a decline in staff and collection budgets as well as buying power due to declining enrollments, inflation and Proposition 13-like tax limitations. As a result, we have been losing ground at a time when we need to expand and refine the kinds of services we provide to meet the new and expanding learning needs of an information society.

What then is the role of school library media programs in fostering the development of young people who are capable, uninhibited, willing and yearning to deal with the ideas, aspirations and problems of humankind? Our philosophy has always included the goal of nurturing a lifelong inquisitiveness and a comfortableness both with ideas and the variety of media that present these ideas. We believe that knowledge, understanding, appreciation and skills in the critical and discerning use of information in its different forms are fundamental to a democratic society as well as to effective functioning in an information world. A much greater emphasis however needs to be placed on developing an analytical posture toward ideas and the capability of critically evaluating information from different perspectives. It is also important for students to develop an interest and positive attitude toward the vehicles that express ideas if a lifelong positive relationship with ideas and information is to be achieved. The independence of mind that comes with a personal, free and independent interaction with ideas also kindles the kinds of appreciations and understandings that permit the enjoyment of the subtleties of life and the aesthetic aspects of our world.

It is critical at this time to have a clear and comprehensive concept of how school library media programs blend into this scene. The abstract and ambiguous conceptions of the past will not be sufficient. The conception of the function and services of a school library media program that

will be used in this discussion was developed by the writer over a period of years as a critical part of the development of a systematic planning and evaluation process for school library media programs (Liesener, 1976). It was discovered early in this work that the conceptualizations and definitions of school library media programs were very inadequate when it came to trying to apply more systematic and rigorous approaches to the planning and evaluation of programs. In order to be able to analyze programs more carefully it was necessary to develop a more comprehensive and cohesive definition. This approach attempts to define from a user's perspective the function and services of school library media programs as comprehensively as possible. This definition is used to illustrate the role of the school library media program in developing the kinds of learners required in our striving for excellence.

The primary function performed by the school library media specialist or program can be viewed as a mediation function. From this perspective, the specialist plays the role of an intermediary between the incredibly complex and rapidly expanding information world and the client. In this sense, the library media specialist is no different than a librarian or information specialist in any other environment. It is the particular environment and the particular needs of the clients served that provides the special focus. Obviously, the environment in this case is the school and the clients are the students, teachers, school staff and, at times, parents.

The concept of intermediary implies that some assistance is frequently required for clients or users to effectively and efficiently interact with the information world. The term information is used here in its broadest sense to include all representations of ideas, including the arts, and in any media format. Assistance is used to indicate anything from a little help to higher level services such as formal instruction, assessing and interpreting information needs, stimulating interest, and actually providing the information in some cases.

The information revolution has provided us with an almost unbelievable array of information options. This information world is incredibly large and complex and in spite of the advances in information technology and the much greater potential access this provides us, the need for an intermediary to assist in achieving effective access to this information world has become more apparent. Even though the microcomputer technology particularly has

made direct access possible to considerable quantities of information for many users, the need for an intermediary is still vital for most users and at times probably for all users.

The school library media specialist performs this intermediary function for the purpose of facilitating the achievement of learning and instructional objectives. This intermediary function is performed in quite a number of different ways. In order to be able to grasp and deal with the whole range of services provided by school library media programs, these services were clustered into five major service categories (Access, Reference, Production, Instruction and Consulting) which are described below.

Access. The provision of *access* to materials, equipment (for example, audiovisual equipment), and space is the traditional area of strength and most clearly perceived group of services provided by school library media programs and libraries in general. It involves providing intellectual and physical access to the whole range of print and nonprint media. This also involves providing access to equipment as well as the procedures and facilities for the use of both materials and equipment. The provision of access to materials that are not in the particular collection of a specific school library media center but are provided through various interlibrary loan or networking arrangements is also included. The provision of access would also include such considerations as copying facilities, making arrangements for special collections either in the media center or in the classroom, etc. Currently the greatest areas of expansion are in the area of provision of access to computers and computer software and services for learners with special needs. In a number of cases computer facilities are being added to school library media programs and the library media specialists are becoming the computer coordinators for the school.

These services not only provide the basic information laboratory for both teacher and library media specialist initiated instructional activities but also, and possibly more importantly, provide an encouragement and hospitality for learner initiated and directed activities which extent well beyond curricular interests and needs. Considerable strides have been made for some adult populations in providing much greater intellectual access as well as physical access in many areas through computerized searching and resource sharing via networking. However, in the majority

of cases these advances have as yet to reach young learners. The problems related to providing the level of service needed here, as well as in the other service categories, will be treated in the next section of the paper.

Reference or Information Services. This service category involves two types of service, the provision of a collection of reference materials for self use and the provision of various kinds of personal assistance to the client in identifying, seeking or interpreting information. This assistance could include: simply helping and identifying where something is in the collection of the school library media center; identifying materials not in the collection but possibly available elsewhere; providing various alerting or current awareness services regarding information on materials or information that clients may not be aware of but which may be of value once they are conscious of them; providing various kinds of bibliographies and pathfinders to assist users in becoming aware of and locating various kinds of sources; as well as the actual answering of questions which could vary from simple to extremely complex kinds of questions.

Very typically the emphasis has been on the lower level services of providing a reference collection and some identification and location assistance. More emphasis has typically been placed on reference services at the secondary level with a heavier emphasis placed on instructions at the elementary level.

The provision of online searching of appropriate data bases for staff, and in rare instances for students, is available in some districts and this will certainly increase. The provision of various computerized services, the development of more data bases appropriate for and accessible to children, and the production of various helping tools to assist clients in analyzing questions and designing search strategies are the activities in this service area that demand immediate attention. Any advance in the development of sophisticated problem solving and information utilization skills will require significant improvement in the level of services in this area. The issue of information services for children and youth needs to receive the level of attention given to these services in the health field, for example, which has been a leader in the development of high level information services. The current approaches to providing reference and information services have not generally been designed on the basis of the understanding of user behav-

ior discussed earlier. Therefore, a significant improvement in this area will require some attitudinal changes as well as technical changes.

Production. Production services involve providing materials, equipment and assistance to teachers, students and staff for producing or adapting various kinds of print but particularly nonprint media. In some cases the production is actually performed for the client but this is normally done only for teachers or school staff and in areas where special equipment or expertise is required. Production can involve anything from making a transparency to producing a television program. These services are provided not only to help make instruction more effective but also to stimulate and facilitate the creative abilities and basic skills of students in effectively communicating their ideas. It will be interesting to see if this function extends in the future into the area of production and adaptation of computer software.

Instruction. Services in this category involve both formal and informal instructional activities as well as reading, viewing and listening guidance activities. Activities can vary from providing various specifically designed self-instructional materials to assist clients in finding and using information, to providing formal instruction programs for both teachers and students in the use of various information resources and information access tools, as well as to providing access and instruction in the use of the newer information technology such as microcomputers. This area also normally involves a great deal of informal instruction for both teachers and students specifically related to particular problems or questions and also involves a variety of guidance activities aimed at stimulating or motivating interest in reading, viewing, and listening. Greatest emphasis has been placed in many cases on the lower level information locating skills; significant improvement is needed in order to develop the strategies and processes necessary to focus more attention on the higher level intellectual skills. A continuing serious problem is the difficulty of integrating the instruction and application of information seeking and utilization skills into the various instructional areas.

Consulting. This group of services involves the library media specialist consulting with teachers regarding

the use of various services and the design of instruction with appropriate attention to information utilization skills. This also includes contributing to the curricular and instructional planning efforts at various levels including the district level. Consulting with students would be considered under either reference or instruction depending on the type of activity.

Consulting services focus on the activities of the school library media specialist with individuals as well as groups of teachers. This area includes the work of the school library media specialist in providing suggestions and information for instructional planning to individual teachers as well as the cooperative planning of various instructional kinds of activities, some of which are conducted by the teacher and some by the media specialist. The level of service may vary from the simple suggestion of a few resources to be used in a particular unit to the actual participation in the design and evaluation of various instructional strategies. This category may also involve assisting and performing the function of a clearinghouse in terms of providing information about and sample copies of various instructional materials which are being considered for use in an instructional area. In some cases, the coordination of the selection and evaluation of all instructional materials is also a function of the school library media program in addition to performing the same selection and evaluation function for the library media center collection.

BARRIERS OR CHALLENGES?

There should be no doubt regarding the need for active and expanded library media programs in schools to provide the kind of intellectual and physical access to ideas and information so necessary for the development of the kinds of higher level skills being demanded. The term program here refers to a library media program capable of performing the important intermediary function as well as providing information services and an information learning laboratory at a very high level of sophistication. To presume that excellence, or for that matter even minimal survival, can be achieved in an increasingly complex and competitive information world with horse and buggy information systems and services is absurd. If we

are really serious about developing highly capable and competitive adults we must begin by developing the requisite skills and application opportunities at the elementary level and continue facilitating the maturation of these skills. Lifelong learning is not simply a catchword but a concept referring to a constantly evolving set of skills and understandings necessary for effective participation in society and the achievement of a full life. This challenge demands serious attention and a significant and continued commitment of resources if we are to succeed in substantially improving our educational effectiveness.

If we are going to make any substantial progress toward our goal we must take a realistic view of the obstacles in the road ahead. The literature includes an assortment of perspectives on the problems faced in this field. The particular barriers and challenges identified here simply represent one view of some of the most critical issues that must be dealt with if we are to provide the kinds of learning opportunities now being demanded. These problems can be perceived as barriers or challenges and hopefully we will confront these barriers as challenges to be analyzed, confronted and solved.

Attitude Problems. A number of serious problems exist in the area of attitudes toward school library media programs and library media specialists. Considerable confusion exists regarding the roles library media specialists do or do not perform and the roles they are capable of performing. Roles cannot be performed and services cannot be used effectively if they are not perceived accurately by potential clients or if there is a lack of acceptance of these roles by either the individuals receiving the benefits of them or the individuals attempting to perform them. Role conflicts of this sort almost inevitably lead to job dissatisfaction and ineffective performance. This condition ultimately affects the ability of a field to retain talent as well as to recruit talent.

What field am I in anyhow? Who am I? What am I? Am I a teacher like one of my client groups or am I something unique and different? These questions and our inability to answer them satisfactorily present a major problem in developing the kind of role described in this paper. The literature is overloaded with studies which analyze the perceptions of school library media specialists and programs by various individuals including principals, students, teachers, parents and library media specialists themselves.

It is not difficult to summarize the conclusions reached in the overwhelming majority of these studies:

> Many of the findings of these studies have negative connotations. In the numerous studies carried out in the past twenty years, a number of conclusions are common: that the school librarian's perception of that role (school librarian's) differs significantly from that of others in the educational system, that the school library seems to play only a marginal role in the total educational program, and that the low regard for the school librarian militates against a direct involvement in the instructional program of the school. (Hambleton, 1982, p. 18-20)

The uniqueness and particular role or function of library media programs desperately needs to be established at this time. It is tragic that the behavior we commonly see is the desperate maneuvering to also be perceived as a "teacher" and to possess a curricular territory in order to increase the odds of preserving one's job. This behavior, while understandable, is serving to further obfuscate the issue rather than contribute to any clarification. The decline in leadership positions at the district and state levels and the organizational and professional isolation of building level library media specialists not only has contributed to the problem but also has created a condition where the likelihood of constructive and effective counter efforts are significantly decreased.

Attitude problems also exist regarding the products of library media programs. Considerable progress has been made in the scope of material formats which we now include in collections but the preoccupation is still too much with the idea containers rather than with the active manipulation of information to facilitate the transfer of ideas to the minds of learners.

The term information itself is a problem in the schools. "Information," as it is used in the schools, seems only to include nonfiction or "fact books" and does not include every form of expression of ideas including fiction. The all inclusive definition which includes all forms of expression of ideas is the way the term is used here and this appears to be the customary use of the term now in library and information science. The "really desirable" use of information according to some library media specialists seems to refer only to the reading of "good books" which

typically refers only to literature of acceptable merit. The development of understanding and appreciation of great literature and literary expression is certainly desirable but it is far from being the whole information ball game. All judgment aside, the rest of the information world is going to play a larger and more important role in the lives of the majority of individuals and therefore needs much more adequate attention.

An attitude that is more understanding of clients' information seeking behavior will be necessary if more clients are to be served and if students and teachers are to develop the higher level problem solving skills which require more sophisticated information skills and knowledge. We have basically designed services in the past on the basis of the philosophy "here we are, come and get it." The objective is to provide a carefully selected collection of materials and equipment and to provide instruction in how to use them. The rest is up to the client with the library media specialist supplying a little assistance and support if necessary. This concept presumes that it is possible to make clients self-sufficient in their use of information and other services and that this knowledge and the skills learned will provide the basis for lifelong learning. We have implemented organized instruction programs to develop these skills beginning at the elementary level and continuing through the secondary schools but most of the evidence to date suggests that other than a hard core group of "readers," users are neither becoming self-sufficient nor expanding their use of libraries as they mature.

It is time that we take a serious and hard look at this view of providing information services and instruction. Twenty years ago Leonard Freiser suggested that we quit this nonsense and instead of forcing kids to spend the majority of their time searching for information with usually poor results, we should give them the information under certain circumstances so that they do have a foundation of good information to work with and as a result, develop the skills and knowledge necessary to understand, use and appreciate ideas and information sources (Freiser, 1963). The belief is that these skills and knowledge are not only more important but must precede the attempt to develop information seeking skills if such efforts are to be effective. This idea would appear to suggest a very heavy emphasis on information provision and reference services at the elementary level with much of the instruction at upper levels, especially the middle and secondary schools. This,

of course, is just the opposite of the current pattern and may explain some of our ineffectiveness in the development of higher level or even lower level locational skills.

The question of the effectiveness of this instruction is very troubling since many of the studies seem to show that the end result of all of this instruction produces college students unable and disinclined to use college and university libraries effectively. There are many studies in this area and most show that if the instruction is isolated from what is going on in the classroom and is not integrated into the classroom instructional activities, the results are dismal (Blazek, 1975). The really discouraging thing however is the fact we have known this for a long time yet our efforts to integrate instruction have, in most cases, been frustrated.

Concern also needs to focus on the content of instruction in information seeking and information use. Ineffectiveness may also result from inadequate or invalid content and a number of factors suggest that this may be the case. Our understanding of information search behavior is still very primitive but considerable insight and new knowledge have resulted from our recent experience with online searching. A detailed discussion of this is not pertinent here, but it is certainly critical at this time to analyze what we have learned and introduce this content into instruction programs wherever appropriate. It is very apparent that the "front end" or question formulation and analysis stage of any search or query needs a great deal more attention. Concerns such as the following must be introduced and applied: how to ask or frame questions, how to proceed to narrow or broaden a topic, how to translate questions into a search strategy, and how to match the strategy with the information system (including traditional manual ones and not only computerized systems). These kinds of considerations are not only important for the development of higher level intellectual skills and knowledge but also intimately relate to many of the curricular content areas, for example, set theory in mathematics and classification concepts in science. It is high time that this profession confront these issues and redesign library media instruction and services in the light of our primitive but growing understanding of information seeking behavior as well as the impact of more sophisticated technology and services. It is also clear that we need to reconsider the concept of self sufficiency in information seeking activities and consider the strong possibility that at least for some activities and

groups of individuals, an information intermediary may not only be a luxury but a necessity.

Personnel and Economic Issues. It would seem that if we recognize the need for the development of basic and higher level intellectual skills and that we are not satisfied with our current performance, the logical response would be to improve and expand the programs necessary to accomplish what is desirable. The current scene however does not represent that kind of picture, undoubtedly at least partially because of declining enrollments, inflation and tax limitation restrictions. Accurate data is hard to find here but some things appear fairly clear. Miller and Moran did a very interesting study of expenditures for resources in school library media centers in 1982-83 which reflects a disturbing picture:

> LIBGIS I (1974) reported an average per-pupil expenditure of $4.22 for books and LIBGIS II (1978) an average expenditure of $4.25 per pupil for books. That LMCs are seriously continuing to lose ground in the purchasing of resources can be verified by comparing those amounts with the 1982-83 mean expenditures of $4.58 (median, $3.71)--a modest average increase of $0.33 over a five-year period during which juvenile book prices rose 30 percent. Media specialists purchasing adult nonfiction and reference books face even greater increases. (Miller, 1983, p. 113)

It is also apparent that in the area of audiovisual materials the picture is even worse.

The very existence of a library media program is not universal. Mahar (1982) using U.S. Department of Education statistics for 1981 concluded:

> In that year (1981), three million pupils (7 percent of the total) attended schools without a library/media center. This figure included a decrease in media centers of secondary schools. (p. 24)

Of course the existence of a center and the existence of a program are two different things with the difference being professional as well as support staff. Here the picture also shows a decline.

The writer conducted an informal survey of enroll-

ments and placements in training programs and also queried some library media supervisors to get some idea of the degree of decline in positions as well as in the supply of new school library media specialists. The results of this informal survey revealed a decline in the number of positions from between five and ten percent with district and elementary positions being most heavily affected. The supply side of the picture however revealed a serious decline in enrollments of students planning to be school library media specialists. A number of the preparation programs have folded entirely and the percent of decline in numerous programs is approaching 90 percent. Several parts of the country which have not been as severely affected economically as others or have shown increases in population are already faced with shortages. Other parts of the nation will very likely also face shortages before long, particularly as we move into a period of increasing enrollments, the so-called "shadow baby boom" which is to begin in 1985 and which is already apparent in some primary school enrollments.

This economic and supply/demand situation obviously creates a whole series of problems for program development and improvement. It is exceedingly difficult to be committed to achieving excellence in a "management of decline" climate. It is also especially disturbing to see the loss of positions in the leadership ranks and at the elementary level which is so crucial to the early development of the attitudes and problem solving skills so in need of improvement and support.

Discussions with educators involved in preparing school library media specialists pointed out another disturbing element. It appears that we are having difficulty attracting the level of talent that we once did. This has been pointed out as a problem of the field of education generally but it also appears to be occurring in the school library media field. This very likely is the inevitable result of an employment situation which provides comparatively low financial incentives and low status but still attempts to maintain extremely high performance expectations. An environment which does not respect or treat individuals as professionals may very well be the most serious problem we face.

A principal who was interviewed in preparation for this paper suggested that a climate of infantilism pervades relationships of all kinds in the schools. The feeling that one is not being treated as an adult and cer-

tainly not provided with the supporting systems and arrangements typically provided professionals appears to be widespread. This is obviously demeaning and not conducive to attracting or retaining capable people and certainly is not an environment which stimulates effectiveness no less excellence. A similar idea was expressed to the writer by a former student who was riffed from her school library media specialist position after ten years due to cuts resulting from a tax limitation provision being passed in her district. She was the kind of person who had always wanted to work with children and was very effective in her role but when asked if she would ultimately return to a school library media position, she said very definitely not. Her rationale for this decision reflected an awareness which was made apparent to her when she secured another job as a librarian in a government agency. She commented that, "For the first time in my professional career I was respected and treated as a professional" and as a result she would not consider being reemployed in the schools. If we are really serious about trying to improve the education of children, we have to face the serious issue of the status, treatment and financial remuneration of educational personnel. It should be readily apparent that without a substantial psychological and economic improvement in this work environment, no significant improvement in the learning environment can or will occur.

Planning and Evaluating Programs. Progress in the planning and evaluating of school library media programs has been extremely slow; it also has been slow in other kinds of library and information environments. Some progress has been made in terms of developing improved approaches but the frame of mind in the field is still centered around the traditional standards approach of measuring one's goodness by comparing what one "has" rather than what one "does" to what is recommended in some arbitrarily derived set of standards. Inadequate progress has been made toward defining the goals and objectives of school library media programs in terms of services provided to clients and contributions made toward achieving instructional and learning goals. As a result, much of the evaluation of library media specialists which is currently performed is based on strictly subjective judgments of the degree to which library media specialists compare to some list of characteristics or attributes that may have nothing to do with the development

and delivery of an effective program of services to users.

Another problem resulting from this approach to planning and developing library media programs is the kind of reporting and communicating that results. The focus is not on the goals and achievements of library media programs but rather simply on the means of these programs. The result of this kind of reporting and communicating behavior is the reenforcement of an already exceedingly confused picture of what the library media program is and does. A more rapid movement toward more output and outcome oriented program management and program communication is desperately desired and needed.

Research must also focus on identifying measurable indicators of program quality that are related to learners and the achievement of instructional objectives. This is an extraordinarily complex problem but without something considerably better than what we currently have available, we will continue to evaluate using tests that frequently focus on simple and often irrelevant facts or extremely subjective judgments of people and programs which can be, and are, extremely unfair and unrelated to program effectiveness.

School library media programs need to be brought into the mainstream of library and information activity. In spite of decades of idealistic and involved discussions of cooperation and participation in networking, etc., we have too few examples of active participation. It is time to look more realistically and critically at what is possible and what is really desirable! We presently have several examples of extensive participation of school library media programs in networking, such as New York and Maryland. These experiences as well as other emerging cooperative activities need to be carefully evaluated to identify what works and why. It would be merciful however to the profession also to face the realities of cooperative and networking efforts and move ahead with what seems feasible and reduce the rhetorical abuse directed at those who raise serious questions.

Education of Library Media Specialists. The training pattern for school library media specialists has been essentially different from that of most other library and information professionals. Many individuals have entered the field via undergraduate programs following the training pattern in most of the other teaching fields. Some say that this is one of the reasons why school library media specialists frequently feel like second class citizens since their initial pro-

fessional training is less than in other areas of library and information services. Another result may be a primary acculturation into the field of application (Education) rather than the specific professional field one is applying (Library and Information Service). This only serves to reenforce the identity problem.

A number of recent analyses of education have suggested a revamping of the structure of teacher training. It has frequently been suggested that a prime requirement of all educators is a "good basic education" and attempts to combine professional education with this objective at the undergraduate level have only resulted in seriously hampering the achievement of both a basic and a professional education.

This writer is very much in sympathy with the suggestion of moving professional education to the graduate level so that both undergraduate and professional programs can be strengthened. A good basic education must be fundamental to the preparation of all information professionals and even though there are theoretically many ways to accomplish this, the time is ripe for a definite move in the direction of graduate level professional training.

Another crossroad which should be faced at this juncture is the responsibility for the preparation of school library media specialists. There has been some confusion regarding who is responsible for the education of school library media specialists and even who or what group has responsibility for accrediting these programs. Some confusion in this regard exists in many disciplines, particularly in the preparation of secondary teachers since there is a split of responsibility frequently with Colleges of Education being responsible for the instructional aspects of the role and the various academic departments being responsible for the subject matter training preparation of teachers. Both of these concerns or perspectives are important and should be respected and the particular organizational handling of the problem left to the higher education institutions.

This writer believes that it is absolutely crucial for the responsibility for the substantive or subject matter content of the programs to be with the various disciplines if the quality of these programs is to be raised and maintained. Faculty who are at the cutting edge of their field should be providing the substantive input here and that inevitably means they are in departments devoted to their discipline. How one conceives of the function and role of

school library media specialists will also influence how one answers the question of who should be responsible for what in the educational preparation of school library media personnel. If one conceives of this person as a teacher who dabbles with media on the side, that is one kind of perspective, but if the information intermediary function is paramount which is the perspective in this paper, then one also must think differently about the discipline of the school library media specialist. The point of view being expressed here suggests that the discipline of the library media specialist is the discipline of any library and information specialist except that the particular application of the discipline or specialization in this case is in the school. Even from the standpoint of instruction, the discipline or instructional specialization of the library media specialist is library and information science and not something else. This is not an attempt to diminish the importance of the application environment but simply to clarify the role and as a result the educational preparation implications. An understanding of the application environment, in this case education, is obviously required but in the case of the school library media specialist a thorough knowledge and skill in the design of instruction is particularly crucial because instruction and participation in the design and planning of curriculum and instruction is an important part of the role of a library media specialist. It is interesting to note that in many other environments the user education function is also being given much more prominence and attention.

The issue of educational responsibility also relates to the identity problem in that it is time for us to come to terms with how we perceive ourselves and our role. We have had innumerable studies relating to the role and it is time we "take the bull by the horns." It is time that we accept and develop the information intermediary function that we perform and not worry about whether we are a teacher or not. Of course we perform a teaching function, but it should be based on our own discipline and related to the essential intermediary role we are playing and need to expand and improve.

Another current danger in relation to educational preparation programs is the diminished scale of the school library media component because of incredibly reduced enrollments. Many of these programs were never very strong but we are now losing relevant faculty positions and our future capacity to continue these programs. The danger

of relegating these programs for token attention to Colleges of Education or maintaining them at a token level in Schools of Library and Information Science should be a major concern. At this time we need the highest level of competence by professionals who have been thoroughly trained in their discipline and not some minimal level of performance by individuals who have only had the benefit of some superficial kind of preparation.

A number of related issues should at least be mentioned. The growing power of state departments of education in accrediting or approving the training programs for school library media specialists as well as certifying these personnel has in some cases intruded on the capacity of higher education institutions to design effective programs. When specific credit and course requirements are specified at the state level for every new concern that comes along, it becomes utterly impossible for a University program to design a cohesive and integrated curriculum. It is important at this time that substantive and technological developments as well as significant changes in function be paramount in a major rethinking of the competencies and educational preparation programs for school library media specialists as well as all information professionals. Obviously, the focus of this attention must also include an analysis of the content and effective delivery of continuing education opportunities. Although there has been significant improvement in inservice and continuing education opportunities for school personnel, there is considerable room for improvement particularly in the content of these programs if they are to be a major vehicle for acquainting professionals with the major substantive developments in the field.

Information Systems for Youth. Considering how much research and development activity is currently underway in the information field, it is discouraging to see how little is being done to develop and make available better and more extensive information systems for children and youth. Data bases seem to be multiplying like rabbits but none seem to be addressed to the learning and information needs of children and youth. Some data bases like the New York Times *Information Bank* could be rich resources for children but they are obviously aimed at other audiences and the organizations marketing them are not sensitive or interested in making any special accommodations for students. It would seem that, considering the number of schools and

students in this country, it would be commercially feasible to develop and market data bases designed to support instruction and learning in some of the most common curricular areas. The development of data bases that will facilitate children's access to ideas by allowing them to interact with relevant information and ideas in a more free and efficient manner should be seriously encouraged. School library media specialists are in a position to identify particularly opportune areas for this kind of development and should be encouraged either to pass on the suggestion or to cultivate an entrepreneurial bent if such is the inclination.

Subject access to information for children is currently extremely weak and in a number of ways is getting worse. Very likely something around 80 percent of the searching for information in any school library media center is searching by subject. Subject access for books and nonprint items usually consists of three subject headings per item in the card catalog which would seem to be a logical approach for a large library but an inadequate approach for a small library that needs to mine its collection in much greater depth to satisfy the needs of its clients. The indexing of periodicals frequently offers the opposite kind of situation where more in-depth indexing may be done but the collection may only have a small proportion of what is indexed leading to a different kind of frustration. Students are also frequently new to a topic so they need assistance in identifying aspects of a subject or in some cases broader terms that would include their term. They also need to have a little information about the items they identify as potentially useful so that they can reduce their actual physical search to items that have a high probability of satisfying their need. What is described here is a small example of an intelligent search strategy and the kind of approach we should be teaching students. A major problem however is that the subject access we provide in school library media programs makes the application of that kind of search strategy or any kind for that matter very difficult and time consuming. As a result, most users don't follow such a strategy and accept what can be found in more efficient but less effective ways.

The critical need here is for a better and very likely computerized indexing system designed to meet the needs of students at different school levels. What is needed is certainly conceivable and feasible but the intellectual work necessary to develop such a system is not underway, undoubtedly because the incentives for such effort are being

directed into other areas. It is even difficult to find individuals in the school field who are interested in this area no less prepared and committed to making a contribution. More and more school processing operations are being discontinued in favor of commercial processing and as a result we are moving more and more to the use of the national schemes devised for adults and large libraries and in many cases inappropriate for small libraries and children. This situation cannot be allowed to continue and substantive efforts directed at devising improved systems for children and youth must be initiated.

CONCLUSIONS

The report of the National Commission on Excellence in Education has identified a number of critical problem areas which must be addressed if we are to achieve our aspirations for excellence and if we are to equip our youth with the skills, knowledge and inspiration necessary to compete successfully in a learning society and an information world. The critical and central role of school library media programs in this venture has been the topic of this paper and the problems that have been identified will have to be solved in concrete and realistic terms if even a modicum of success is to be achieved. It should be clear that library and information programs and personnel of all types and at all levels must be intimately involved if we are to produce the self-directed problem solvers who are not only information literate but who have developed the higher order intellectual skills and attitudes regarding learning that we all seem to feel have become the "new basics."

Our focus must be the intellectual health and productivity of America and it is obvious that there is a serious discrepancy between our current level of performance and our aspirations. This society has the resources and the capability to achieve educational excellence but does it have the will? The educational community has been the whipping boy for all kinds of social issues for too long. It is time that the first class expectations of education be supported with something significantly more than the third class support of the past and simply more rhetoric is not the answer. Possibly even more important, an attitude of respect and regard for the fostering of learning and intellectual health must be developed in this society that com-

pares to the respect and stature given the fostering of physical health.

This shift in national priorities must be combined with a direct attack on the problem areas identified in this paper. In addition, national information policy discussions cannot continue to ignore children and youth. Teachers must be information literate if kids are to be information literate and they must be able to capitalize on the information resources and services available to them. We must be able to recruit and keep a high level of talent. The implications here for teacher training as well as the preparation of library media specialists are readily apparent.

It is inevitable that this kind of analysis raises more questions than answers but this particular field has as many questions or probably more than most particularly as a result of the information revolution. Consequently, research and development must receive a high priority in the multitude of efforts that should be initiated. The highest priority however should be the improvement of the economic and psychological environment for educational personnel including library and information personnel of all kinds so that the talent and commitment that we already have can be retained and actively nourished as well as replenished with a high level of competence. Hopefully these papers and seminars will contribute to the raising of the national consciousness and the mobilization of the national will that will be necessary to achieve the educational excellence we see as a national and individual necessity and challenge.

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PUBLIC LIBRARIES AND EXCELLENCE: THE PUBLIC LIBRARY RESPONSE TO A NATION AT RISK

By *Douglas L. Zweizig*

The year 1983 may well be remembered as the year of the educational commission report. At least eight major reports were issued from such organizations as The College Board, The Education Commission of the States, and the Business-Higher Education Forum, with titles that urge "Action for Excellence," warn of "America's Competitive Challenge," and declare "A Nation at Risk."[1]

The reports seem unanimous that the American educational system, if not failing, should certainly be put on probation.

These reports, and in particular, The National Commission on Excellence in Education report, *A Nation at Risk*, have promoted a wide and welcome discussion of American education. It is in this context that the educational role of the public library is being examined. Like public schools, public libraries can do better to promote the realization of educational excellence for their communities.

A Nation at Risk is concerned primarily with secondary schools. It charges that the graduates of those schools are inadequately prepared for higher education or for employment. It recommends specific changes in the areas of educational content, levels of performance to be achieved, amount of time to be dedicated to education, competencies and rewards for teachers, and quality of leadership and fiscal support. The report warns that the quality of American life, the effectiveness of our democratic society, and the ability to compete in the world economy are all threatened.

This paper discusses the roles public libraries may take in responding to those issues. However, the educational role of the public library may not be obvious. If the focus of the report is on secondary schools, what role does the public library have in reducing the risks the report puts forth?

Public libraries are one part of the complex education-

al enterprise of the United States. The purpose of that enterprise is a knowledgeable and skilled populace; and the reports warn that the purpose is not being achieved. *A Nation at Risk* focuses on one means for achieving that purpose, the nation's public schools; but schools have only partial access to the populace for a limited period of their lives.

The public library is an egalitarian institution. It provides the means by which all members of society can inform themselves, can learn new skills, can investigate opportunities, can encounter varying viewpoints on personal and social issues. To the degree that individuals in our society do not possess the abilities to benefit from public library resources, they are, as the report proclaims, "effectively disenfranchised, not simply from the material rewards that accompany competent performance, but also from the chance to participate fully in our national life." If people are not competent to use public library resources, the public library cannot succeed in its egalitarian mission.

The public library has a close relationship to both formal and informal education. Public libraries provide supplementary materials and services to those still in school. And when public library clients leave high school at the end of the first quarter of their lives, the public library is the single institution that freely provides "continuing education" for those clients for the remaining three quarters. To the extent that high school graduates are ill-prepared, the public library, in cooperation with other agencies, has the obligation to see to it that those graduates gain the skills to continue to learn.

A report from the Business-Higher Education Forum points out that "today's adults will still constitute over 90 percent of the work force in the year 1990 and over 75 percent of the work force in the year 2000."[2] We cannot look only to the secondary schools for the needed improvements in the educational level of our work force. A spectrum of agencies, with the public library in a prominent position, must address the continuing education of this public.

Public libraries serve the educated very well, and are most used by those most educated. Some have even suggested that public libraries should deliberately concentrate their attention on the better educated user and not attempt to serve those less able to use libraries. However, *A Nation at Risk* warns us that the educated elite have

become a smaller proportion of the U.S. population. And such arguments ignore the interdependencies within a democratic society. If those most in need of public library services are reluctant to use libraries, then librarians must be more bold in the design of needed services that will be used.

The intent of this paper is to explore the public library's role in responding to the call for excellence as described in *A Nation at Risk*. To prepare for this assessment, the paper will discuss some of the particular challenges facing public libraries as they attempt to respond. These challenges are the decline of literacy in the information society, the constriction in economic support for public libraries, and the increased sameness of available information. Developments in public libraries that offer optimism for the public library's ability to respond will then be reviewed: a shift from an institutional to a client orientation, rethinking of the public library mission, and reorganization and cooperation for increased effectiveness. The continuing constraints under which public libraries struggle will be addressed in order to point out present limits to their ability to respond: continuing economic pressure, perceived irrelevance, and lack of training and skills. The recommendations for public library response have been organized in parallel with those in *A Nation at Risk:* recommendations regarding content, standards and expectations, time, teaching, and leadership and fiscal support.

Public libraries are a critical resource for reducing the risks identified in *A Nation at Risk* and for supporting excellence. For them to function effectively in this endeavor requires a renewal of commitment and recognition by kindred agencies and their communities.

I. CHALLENGES FACING PUBLIC LIBRARIES

A. *Decline of Literacy in the Information Society.* Probably the most serious challenge for public libraries is the 23 million functionally illiterate American adults. (The estimate of "13 percent of all 17-year-olds in the United States can be considered functionally illiterate" warns that the problem will be persistent.)[3]

Problems that functional illiteracy brings for adults in terms of inability to participate in social decision making, to grow in their work, to renew themselves in their leisure,

do not need to be detailed here. Adult illiteracy is intolerable in our information society. The problem, however, has been an orphan. No government agency has taken the problem to be its own and the secondary and post-secondary schools say that these adults no longer are their clientele. Public librarians say that they cannot function as teachers--that they have neither the numbers nor type of staff required to address the problem which is compounded by the illiterate adult's reluctance to admit to the deficiency. As a result, illiteracy has been addressed by heroic, undersupported, volunteer-intensive, adult education programs.

Adult functional illiteracy has been recognized for at least ten years, but efforts to date have not altered the size of the problem. It now seems clear that major and coordinated efforts will be required. The State of Kentucky, which estimates that 440,000 of its adult citizens are illiterate, has formed the Kentucky Coalition for Literacy, Inc., an organization that will foster the development of local literacy problems. Since no single local agency addresses the literacy problem, the Kentucky Coalition identifies those local agencies interested in literacy and fosters coordination of efforts. B. Dalton Bookseller has announced a $3 million grants program to fund community literacy programs. The chief executive office of B. Dalton estimates that, "In dollar terms alone, adult illiteracy is costing the country an estimated $225 billion annually in lost industrial productivity, unrealized tax revenues, welfare, prisons, crime, and related social ills."[4]

Promotional campaigns of public libraries repeatedly urge reading ("Get into books!" "Be all you can be, read!" "You are what you read."), but public libraries themselves have yet to play a major role in the achievement of adult literacy.

B. *Constriction in Economic Support for Public Libraries.* When public funds seemed ample (1960s), public library needs for funding were seldom questioned. However, as public funds have become more precious, public libraries have a difficult time maintaining previous levels of support. An annual survey of public library expenditures showed that 1982 expenditures remained below the purchasing power of 1977 and 1978.[5] City and county administrators encourage the saving of public funds; institution of user fees for services is rewarded. When the focus on the educational role of the public library is lost, the rationale for public

funding of public library services becomes blurred. Without the educational role, public libraries seem just another community amenity, like community swimming pools or parks.

The current focus on the need for excellence in public education is relevant to why public libraries are publicly funded. Since use of a public library is voluntary, it is assumed that an individual uses it because there is some individual or private benefit to be gained. If the benefits were solely private, each individual would be expected to bear the cost of those individual benefits. However, there is, in addition to the individual benefit from library use, a societal benefit. Society benefits because the student has used public library materials to supplement school work, or because a homeowner has learned how to insulate an attic, or because a business person has identified firms to whom to market a product, or because someone attending a program on aging presented at the library is better able to understand an aging relative. When there are social benefits in addition to individual benefits, it is in the social interest to support library services. If society did not provide support, then individuals would use the library less than is desirable in terms of society's goals.

We intuitively understand this argument when it is applied to schools and have mandated in law that schools must be supported and have even required attendance. In contrast, legislation for taxation to support public libraries is permissive, not mandatory; use of a public library is voluntary, not required. This voluntary nature of public library support and use has lead to the unfortunate notion that library services themselves, although probably desirable, are not crucial.

Funding levels are almost entirely determined at the local level. For example, in 1977, 75 percent of funds for public libraries came from local sources.[6] Data for that same year show 26 percent of public libraries expended less than $3 per person per year in their communities while 19 percent expended $9 or over per person. This disparity in locally determined levels of service produces a marked inequality in educational services offered through public libraries.

As a consequence of increasing economic difficulties libraries are retrenching in terms of the library's role and services. Programs have been "laid off" on the basis of seniority: the new programs are the first to go, and innovation has not always taken root. These newer programs,

often programs extending services to new and/or disenfranchised users, were accepted by library administrators and local funders while they attracted federal or state funds, but frequently were not seen as central to the community goals and objectives. Particularly relevant to the *A Nation at Risk* report is the elimination of positions specializing in services to young adults as professional staffs are reduced. Services for young adults are likewise being eliminated or being reassigned to librarians with no preparation for such services. Collections of young adult resources are merged with the general collection with no staff able to guide young adult users to them.

C. *Increased Sameness of Available Information.* Television has been criticized as a medium for delivering the same message over and over. A number of pressures are resulting in the same being true for other media, most notably publishing as illustrated by the following points:

- Tax laws require that publishers pay a tax on their inventories of unsold books. This means that publishers cannot afford to publish the title which appeals to a limited audience and which will take years to sell out. Publishers are driven to titles with the widest appeal which will sell out quickly.
- Franchise-operated, chain bookstores in shopping malls across the country are designed around the concept of high volume sales. Similar stock appears in most stores based on inventories managed regionally or even nationally. Space on the most prominent shelves is available to publishers to move their current, large quantity, heavily promoted titles. Slower moving titles are relegated to lower shelves or may be removed from the book store stock entirely.
- A successful author has been told by an editor that the publishing house will bring out titles in only five areas in the future: movie star biographies, diet books, cookbooks, romances, and specialty books for pre-determined audiences. These are areas with a perennially large market.
- Publishing is more and more coordinated with "package deals" in which the book title is repackaged into magazine articles, film, or television, so that each appearance promotes the others. Media spin-

of products further homogenize information and entertainment, creating brand-name recognition and consumer demand based on familiarity with the general rather than the specific, the unique, or the unusual.

Citizen interest groups seek to control what information will be available in our public schools, public libraries, and media: pictures of communist leaders are removed from textbooks; scientific theories that conflict with religious beliefs are muted; dictionaries that include present language usage are removed from approved lists; school editions of prize-winning books are republished in expurgated form; textbook review committees in a few large states affect what textbook publishers will offer and therefore limit what is available in all states.

The public library has had the mission of enhancing the diversity of information available to citizens. In the past it has been able to do this chiefly by relying on trade publishers. Since trade publishers are increasingly concentrating their areas of interest, public libraries have the challenge of identifying and filling in the gaps. This represents a considerable task for public libraries. Since (as of 1978) "3.3 percent of 6000-plus companies control about 70 percent of the publishing industry's volume,"[7] public library book selectors will also have to select materials from the other, less visible 5800 publishers to provide a diversity of subjects and viewpoints.

This challenge comes at a time when the availability of information from the federal government is being curtailed. Government agencies are urged to charge publication prices that would be high enough to recover costs. Government information services and publications are reviewed for feasibility of transfer to the private sector. The government's two biggest collectors of statistics, The Census Bureau and the Bureau of Labor Statistics, have cut programs (as of May 1982) because of budget reductions. The *Federal Register* annual subscription increased from $75 to $300; the *Congressional Record* from $75 to $208.[8]

In contrast to the increasing sameness from mainstream publishers, the amount of information published each year has increased dramatically. The number of titles produced annually by American publishers has tripled in the last twenty years, reaching close to 50,000

titles in 1982.[9] Limitations on overall public library budgets and increasing operating costs have brought budgets for materials from 19 percent of annual expenditures in 1970 to 15 percent in 1982.[10] The average cost of a new book title in 1982 was $30.59. The average cost of a juvenile title has jumped from 45 cents in 1962 to $8.87 in 1982. The effect of this increase in book production and cost coupled with libraries' decreasing purchasing power means that public libraries have been able to purchase less of what is published.

II. DEVELOPMENTS IN PUBLIC LIBRARIES

A. *Shift from Institutional to Client Orientation.* Public libraries in the United States once were guided by standards that indicated, for instance, the number of books they should have, the size of the building, and the number of staff. These standards related to the institution, not to its clients. These standards didn't evaluate whether the books were used, whether the building was inviting, or whether the staff members were helpful. The library community had faith that increased resources would in themselves lead to better service.

As public librarians considered revising these standards they understood that a new form of guideline would be needed.

The first recommendation in the new guidelines was that local public libraries should use citizen committees to help them plan appropriate local public library services.[11] This planning process is to be repeated over the years to ensure that services remain appropriate. The more recent recommendation is that public libraries, in addition to planning, should systematically measure the level of services provided to the community. A manual of standardized procedures has been provided.[12] Libraries will be able to compare their levels of service with libraries in similar communities with similar objectives.

The shift has been from an emphasis on what the community gives to the library to also include what the library gives to the community. This progression in public libraries is continuing, and it encourages public libraries to be more responsive to the challenges of supporting a learning society.

B. *Rethinking of the Public Library Mission.* The shift

from an institution orientation to a client orientation and continuing economic stringency have brought a rethinking of the public library's mission. *The Public Library Mission Statement and Its Imperatives for Service*[13] pointed out that runaway social change, exponential growth in the record, total egalitarianism and depletion of natural resources, all require the design of a renewed institution that will be responsive to today's conditions. Lowell Martin has enumerated the multiple missions that public libraries have attempted to perform simultaneously: "the People's University, the student's auxiliary, the children's door to reading, the free book store, the information agency, the scholar's workshop, and the community center."[14] *A Planning Process for Public Libraries* instructs the planning library to create a specific local mission statement that says what the local library will be for its community in the next few years.

This attention to the mission of the public library is healthy and has prepared the way for considering this recent challenge: What public library mission will support the improvement of primary and secondary education and provide for the lifelong support of the Learning Society?

C. *Reorganization and Cooperation for Increased Effectiveness.* The challenge of providing resources to support lifelong learning is beyond the capacity of most individual communities. In 1977, 65 percent of the public libraries in the United States served communities of 10,000 or less, with average receipts in 1977-78 of less than $23,000.[15]

Public libraries have employed a variety of devices to obtain the resources necessary for service. In some states, community libraries have combined to form consolidated county systems; in others, federated library systems have been formed. Public Library Association standards and state library agencies have promoted the formation of these cooperative library systems to centralize such functions as interlibrary lending, audiovisual resources, staff development, and centralized purchasing.

Even for those libraries still organized at the community level, interlibrary lending can supplement resources. Systems and state library agencies have established state and regional networks so that the most isolated communities have an access point to the resources of the nation's libraries. The proportion of interlibrary loans to total circulation is low (estimated at 3 percent), but this service often represents access to critically needed materials.

III. CONSTRAINTS AND LIMITING REALITIES

A. *Continuing Economic Pressure.* The economic pressures on libraries are continuing. The library press regularly reports bake sales, book sales, celebrity shoe sales, auctions, and other fund raising events that attempt locally to make up for cuts in governmental support. Foundations are being asked to fill in the gap between service needs and budget levels. Volunteers are being sought to make up for lack of staff. Retirements or other staff terminations leave positions not filled, with responsibilities reassigned to a smaller staff, often untrained for the added professional load. The library is praised for increasing productivity, that is for doing more with less.

These responses to declining tax dollars have some benefits: community interest and support are made evident, foundation monies are received by a few, libraries are rethinking programs and procedures. However, each of these responses is a short term solution: fund raising events have only so much appeal; foundations are not interested in sustaining contributions over years; volunteers need continuously to be recruited and trained; there are limits to how much productivity can be increased. The reality is that the economic pressures are going to continue, and libraries may have to become more effective in demonstrating what they return for the tax dollar, i.e., through programs that contribute to the community's economic base: literacy, child care and nutrition, family planning.

B. *Perceived Irrelevance.* The public library is intended to be *the* community agency to which its citizens will turn when they have questions or need information. But a number of studies have found that less than 5 percent of U.S. adults name the public library as a place they think to go for information.[16] This is true for a wide range of topics about which citizens have concerns: education, social issues, housing, and occupational choices are examples. This is much less than the number who use public libraries; the average community can expect that almost half of its adults will visit or phone the library in a year. But when asked to think of places to get information, less than 5 percent name the public library.

We are challenged, therefore, to increase the public awareness of how the public library can function for them.

C. *Lack of Training and Skills.* A continuing problem for communities served by public libraries is a lack of trained staff. The 65 percent of public libraries which serve communities of 10,000 or less have an average of less than two full-time-equivalent staff per library. Only 19 percent of these staff have a graduate degree.[17] Less than 19 percent can be assumed to have a graduate degree from an accredited library program. This means that the great majority of small public libraries are staffed by persons with inadequate preparation.

For those public library staff with graduate training, rapid developments in the application of automation to library cataloging, retrieval, and circulation procedures require that their training be updated. When libraries are understaffed and staff under-rewarded, there is little time or motivation to gain new skills.

IV. RECOMMENDATIONS

A. *Diversify Content. A Nation at Risk* charges that "secondary school curricula have been homogenized, diluted, and diffused" and recommends a strong preparation in five "New Basics": English, mathematics, science, social studies, and computer science. Public libraries may choose to take the objectives for each of these basics as criteria for the selection of materials and services. Not only might public libraries have materials and services to support students acquiring this content, they should also have materials and services which will enable those no longer in school to acquire these basics, and which will enable the graduates from basic programs to be currently and continuously effective in their knowledge.

Public libraries also have a unique mission to go beyond these basics to provide a great diversity of content for their communities. In the Learning Society, public libraries need to be the community's learning and inquiring center. Libraries need to continue their provision of access to materials in collections other than their own. Libraries need to respond to the increasing sameness of mainstream publishing by enhancing these offerings with alternative publications.[18] Public libraries can add the service of obtaining access to published and unpublished materials from governmental agencies and to become much more active in the use of the Freedom of Information Act on behalf of their patrons.

B. *Standards and Expectations. A Nation at Risk* found that the expectations for achievement have been dangerously lowered and recommends greater emphasis on achievement and higher standards for admission to college. Public libraries have commonly provided information on college opportunities and will be an important informant regarding new standards. As part of the coalition promoting educational excellence, public libraries can support efforts in their communities to reform curricula and spur increased achievement. For adult learners, public libraries can continue their support for General Equivalency Diploma (GED) and College Level Examination Program (CLEP) Exams. Public libraries can also promote excellence in learning through strengthened Learner's Advisory Programs.

C. *Time. A Nation at Risk* finds that too little time is spent in school, that the time spent is not effectively used, and that students are not well prepared to work independently. The report recommends longer school days, more days of school, and more homework.

The school library or media center has the primary mission of providing resources to support the school's curriculum. In general, the public library mission regarding students in public schools is to provide supplementary or recreational resources. However, community situations and resources vary and no single delineation of missions will serve. Some areas have strong school resources; others do not. Some communities have neighborhood schools with extended hours for library service; others bus a significant proportion of students or close the library at the end of the school day.

The public library can promote educational excellence for its community by planning jointly with community schools for the information requirements of students. In some cases, such planning has resulted in public library staff serving in the school library after school hours. In other cases, public libraries have homework hotlines for students to call in the evening. Public libraries can play a major role in assisting students and encouraging them to work independently, implying a need for staff trained to provide such services. In addition, public libraries can continue to provide programs over the summer which will allow students to acquire the "New Basics" or to encourage reading with supplementary materials.

A contribution that public libraries can make regarding time is to be open for service when most needed. In

a state where public library services are fairly well developed, only 58 percent of libraries serving 5000 people or less report being open even one evening per week.[19] Figures from 1977 show that only 8 percent of U.S. public libraries are open seven days a week; 61 percent of the libraries serving 10,000 or fewer persons are open five days weekly or less. The majority of libraries (61 percent) are open less than 8 hours daily.[20] If public libraries are to serve the needs of school students and working adults, they need to design hours of service that expand beyond the school day or normal work day.

D. *Teaching*. The findings and recommendations of *A Nation at Risk* addressed to teaching relate to poor preparation, inadequate incentives, and the absence of a career ladder. Public libraries have no direct effect on those problems. However, teachers use public libraries for their own course work and professional development. Public libraries can link teachers with the literature of education and of their subject areas. In addition, libraries are frequently used by teachers as sources of materials to support their classroom teaching. Public libraries could plan more actively with teachers (as well as school librarians) than they do now. Questions to be addressed might include: What materials the public library needs to have in order to support or supplement homework assignments, what assignments will be coming up in the next year, what levels of assistance to students will aid learning. Such a recommendation to actively support public education clearly implies need for additional professional staff and for a clarification of roles among the library, classroom teachers, and school media centers.

The report deals with classroom teachers. Public libraries can also actively support the efforts of literacy instructors and other trainers in business and community organizations with relevant materials and, where appropriate, classroom facilities.

In academic libraries, there is a current emphasis on bibliographic instruction (that is, instruction in the use of libraries and library resources) provided by the library for the students. Public libraries can support school performance and post-secondary learning by offering an analogous service. The objectives of such a program should be to aid users in identifying the information aspects of a problem, to alert users to the capabilities of the library, and to inform users of the diversity of information sources

available, as well as to train users in the use of the public library and information handling technologies.

When addressing the problem of quality teaching staff, the quality of the library staff as teachers cannot be ignored. Professional public libraries have training and experience in the service of patron requests for information whether the request is for a specific document or for general introduction to a subject of interest. If public library staff are to take a more active role in instructing users, additional training should be provided in instructional strategies, in motivating learners, and in readers' advisory skills.

But, in addition to providing continuing education for public library professionals, the absence of professionally qualified librarians in many of our public libraries should be addressed. States have been reluctant to impose educational requirements for library directors and staff on local library boards. People living in our smaller communities use libraries staffed with people with no formal library training. We cannot expect an institution with untrained personnel to be able to respond to a challenge to excellence.

E. *Leadership and Fiscal Support.* Recommendations in *A Nation at Risk* point to the educational leadership role of local, state, and national school officials and the funding and governance role of school board members, governors, and legislatures. Public libraries can be involved in the leadership and fiscal support for education on a number of levels.

At the local and state level, public libraries can be active members of a support coalition both for education in the public schools and for education in the community at large. They can assist principals and superintendents in articulating the case for needed educational reforms. They can also help state the case for strengthening the full range of educational programs in the community, from day-care education through adult literacy programs, whether or not they are formally associated with the library.

At the local level, the public library is an ideal sponsor for community forums on the state of education in the community. The forums could focus on such themes as the findings of a community survey of educational attainments, educational opportunities for the physically or mentally handicapped, preschool or adult education resources, or

vocational education. The point of the forums would be to discuss education as a community, rather than an institutional, concern.

At both the local and state levels, public library representatives can make the case for excellence of public library services, and can make clear both the organizational patterns and the funding levels necessary to support excellence.

At the state level, the state library agency should assess the needs for public libraries not only to reach adequacy but to foster excellence. As educational institutions in the state, public libraries deserve greater attention and funding from state legislatures. The case for tax support for public education is well established. The decisions regarding levels of support are purposely made long term by mandating support in state law. Public libraries, in contrast, are seen as optional and their support is decided almost entirely by the local jurisdiction in an annual process. To the extent that a case can be made for the public library's educational function, a case can also be made for a substantial state role in funding. With at least 23 million adult illiterates, the state cannot cease its interest in education at the twelfth grade.

The importance of the public library as an educational institution needs to be given stronger voice at the federal level. This paper has been prepared as part of a federal expression of interest. The placement of the federal agency in support of public libraries, in the U.S. Department of Education, acknowledges the public library's educational mission. But there is a need for a renewed expression of the public library's place in the educational enterprise and a federal commitment to help libraries move beyond the near ground of adequacy to support the excellence attainable at the horizon.

F. *The Public Library Role in Planning.* In *A Nation at Risk*, libraries are cited in passing in the report as a member of the "array of educational organizations." But the public library is a tax-supported information agency that is accountable to all the residents of its community. It has the responsibility to see that the information requirements of all residents of the Learning Society are met. These requirements may be met through a range of services: from delivering a document, to providing a library program, to teaching reading skills, to sponsoring community meetings, to holding a story hour.

The public library can meet its responsibility by convening a community planning committee, representative of all the educational and informing organizations in the community, to determine how these organizations can best work together to ensure that each resident is appropriately served.

This planning committee should include the educational agencies in the community as well as representatives of client and other interest groups. The task of the committee would be to survey the educational state of the community and to implement ways of cooperatively improving that state.

G. *Reporting on the Public Library Educational Role.* Earlier in this paper, the educational function of the public library was argued to be the most justifiable for public funding. The educational function is intended as a broad, rather than narrow, term--including not only support for homework assignments, for literacy programs, or for formal instructional programs but also the educational benefits derived from one user reading a book of interest, obtaining the answer to a question or understanding of a problem, or attending a library program. The public library's special contribution is that individual users can obtain the unique educational resource needed at the time needed and in the form found most useful.

In order for this educational function to be recognized and appreciated by the funding communities, public libraries need to make the educational function much more visible. In addition to a regular program of news releases to local newspapers and calendars of events, a public library could prepare an annual educational report to its community. The report should describe the rationale for the public library as an educational institution, enumerate the clientele for this function, give the educational goals and objectives for the previous year and report on their achievement. Specific educational activities should be described with numbers served by each activity. This rationale can be presented and reviewed each year.

The point of the report would be to communicate the educational contribution the public library makes to the community.

Along with increasing public awareness of the educational contribution of the public library, more stable and more ambitious funding levels can be sought.

V. CONCLUSION: THE PUBLIC LIBRARY RESPONSE

The risks to which the National Commission on Excellence in Education alerts us must be taken seriously, and public libraries should not fail to respond with their special contribution.

The public library is an institution that provides individualized services. It is ideally suited to serve the adult learner who is not asking to return to the classroom but to be able to work toward an individual goal.

The public library is seen as a neutral institution that can convene community meetings on educational excellence.

Volunteer informational and educational agencies in the community generally welcome public library support. The public library is acknowledged to be better able to obtain, organize, and deliver information. The public library can provide stability for agencies that depend on fluctuating funds and volunteer interests.

Finally, public libraries are working in an area of unlimited opportunity for growth. The learning needs of the community will continue to increase and at ever greater speed. Educational agencies are not competing for clients. Current estimates place over half the United States work force in information related occupations, and the proportion is expected to grow to two-thirds by the year 2000. Those already oriented to information use will continue to demand services from public libraries. The person who buys books, subscribes to journals, and attends adult education classes is most likely to be a frequent library user. A marketing manager for *USA Today* observed that this new newspaper does best in cities with strong local newspapers because newspaper readers will buy another newspaper, but in communities that do not support newspapers, *USA Today* will also not do well.

In addition to serving the high information consumer, the public library has the special mission to help all citizens participate fully in the Learning Society. Literacy is the basic requirement for participation. Public libraries can help prevent adult illiteracy by supporting quality public education and can reduce illiteracy by joining or leading local coalitions for literacy.

Beyond the basic requirement of literacy, participation in the Learning Society requires continual updating of knowledge, ability to negotiate overwhelming quantities

of information, and information delivery tailored to the interests and abilities of the learner. The public library, as the community agency charged with fostering full participation by all residents, is designed for these tasks and can, through coordination of community resources, support the progress toward excellence.

NOTES

1. For a review of eight recent, nationally sponsored reports on education, see J. Lynn Griesemer and Cornelius Butler, *Education under study: an analysis of recent major reports on education*. Chelmsford, Mass.: The Northeast Regional Exchange, Inc., 1983.

2. Business-Higher Education Forum, *America's Competitive Challenge: The Need for a National Response*, 1983, p. 22. (Business-Higher Education Forum, Suite 800, One Dupont Circle, NW, Washington, D.C. 20036).

3. *A Nation at Risk: The Imperative for Educational Reform*. The National Commission on Excellence in Education, 1983, p. 8.

4. B. Dalton Bookseller, News Release, Minneapolis, August 31, 1983.

5. Herbert Goldhor, "University of Illinois Annual Survey," *American Libraries* 14, September 1983, p. 537.

6. 1977 public library data are from the LIBGIS III survey as reported in Donald J. Sager, "Research Report on the American Public Library, Report Number: OCLC/OPR/RR-82/1, Dublin, Ohio: OCLC, 1982.

7. Patricia Glass Schuman, "Libraries and Alternatives," *in* James P. Danky and Elliott Shore, eds. *Alternative Materials in Libraries*, Metuchen, N.J.. Scarecrow, 1982, p. 1.

8. "Less Access to Less Information by and about the U.S. Government," *ALA Washington Newsletter*, 34, July 26, 1982.

9. Book trade statistics are from the *Bowker Annual of Library and Book Trade Information*.

10. Herbert Goldhor, "University of Illinois annual survey," *American Libraries*, 13, July/August 1982, p. 458 and 14, September 1983, p. 534.

11. Vernon E. Palmour, et al. *A Planning Process for Public Libraries*, Chicago: ALA, 1980.

12. Douglas L. Zweizig and Eleanor Jo Rodger, *Out-*

put Measures for Public Libraries, Chicago: ALA, 1982.

13. Chicago: ALA, 1979.

14. Lowell A. Martin, "The Public Library: Middle-age Crisis or Old Age?," *Library Journal*, January 1, 1983, p. 19.

15. Sager, pp. 5, 10.

16. Douglas Zweizig and Brenda Dervin, "Public Library Use, Users, Uses: Advances in Knowledge of the Characteristics and Needs of the Adult Clientele of American Public Libraries" *in* Melvin J. Voigt and Michael H. Harris, eds *Advances in Librarianship*, Volume 7. N.Y.: Academic Press, 1977, p. 237.

17. Sager, pp. 24, 25.

18. See Schuman, *loc.cit.*

19. Herbert Goldhor, unpublished report, 1983.

20. Sager, p. 19.

LIBRARIES AND THE LEARNING SOCIETY: RELATIONSHIPS AND LINKAGES AMONG LIBRARIES

By *Peggy Sullivan*

Whenever education is criticized or challenged, libraries must be considered. The publication of *A Nation at Risk* and other critiques of U.S. education today causes the library community to review its priorities and what it can do for the problems identified. Unfortunately, the main response tends to begin with a wistful: "But why weren't we mentioned?" This attitude is roughly comparable to that of the citizens of cities who write to editors of newsmagazines when their places of residence are not included in the list of those major cities most likely to be bombed in a sneak attack. The intent is to say: We are important, we do make a difference, and this should be recognized. But too often, this comes across as second-guessing rather than the reaction of a full participant in the educational enterprise.

LIBRARIES: WHAT THEY ARE

That libraries are participants in education cannot be challenged. Whatever definition of education or learning is used, libraries are part of it. They are sources of information, open depositories of literature, sites for tutoring programs and almost every kind of self-help activity a community can envision, and they offer or are parts of many kinds of instructional programs. Libraries are part of education, but the parts they play vary according to the kind of library they are as well as their locations, scope, purpose, and resources.

Range of Types of Libraries. The four major categories of libraries are public, academic, special and school. The latter three are by definition most likely to be parts of other institutions, but there are few hard and fast distinctions among libraries. While most research libraries are

associated with universities, government and public libraries are numbered among them also. Many libraries in schools and community colleges have taken on some of the characteristics of public libraries, opening their doors to the community and lending materials beyond their immediate publics of students and faculty, just as public libraries, especially in times when support has eroded, offer services and materials closely coordinated with the schools in their communities.

Each of these libraries has its subgroups also. Typically, one thinks of the closely-linked branches of a public library system, but there are networks of many kinds among libraries. These include the automated linkages of some law libraries, the extension-site branches of academic libraries, and the developing systems of multi-type cooperative library networks. Librarians and the libraries where they work have developed interesting mixes of autonomy and cooperation. And these mixes are shifting and changing all the time. The corporate library of a major industry may have a collection that stresses journals for the attorneys, accountants, and marketing experts who make up most of its clientele, but it may add some items of more general use if its location causes its users to rely on it for other reading materials, and it will surely need, from time to time, to use the resources of other libraries when a potential client or a possible business merger requires background information in an area not earlier recognized as being in its purview.

It is too easy to generalize about libraries, to picture that all public library branches serve children, housewives and senior citizens; that school libraries, with their distinctive ties to the curriculum, have limited, very similar collections and clienteles; that academic libraries serve only the education-based needs of their publics, and that special libraries are small, one-person operations with emphasis on personal services. These may be characteristics of many libraries in each category, but the picture of libraries is richer, more diverse than those characteristics suggest.

In their relationships, libraries also have different patterns and purposes. A single library may be associated with other libraries because they are part of the same community or linked through a common management, but it may be related to another group of libraries because of similar purposes or patterns of organization, as various state universities within one state may be linked, while

it shares bibliographic utilities with an entirely different mix of libraries. Each of these relationships may affect every aspect of the library's program of services. By agreements formal or informal, it may have been assigned a part of the collection for intensive development so that it may serve as a major resource for neighboring libraries in an area such as art, in return for assistance it may seek and get from another library that is emphasizing business or literature in its collection.

Uniqueness and Similarity of Missions. No two libraries have identical missions nor identical means for achieving them. It is hard to imagine that any library does not have as part of its mission a commitment to the learning society that is as broad as our civilization, and as narrow and focused as a neighborhood or a small group of users. Some libraries, notably those in schools and other academic settings, are committed to making it possible for people to use them more effectively, but even libraries that are seen as places for more personal service provide signage, personal assistance, and directions for users who wish to be able to conduct their own searches for material.

Margaret Edwards, former coordinator of young adult services at the Enoch Pratt Free Library and a champion of direct assistance to library users, maintained that the seven most hated words in the English language were: "Look it up in the card catalog." She was making the point that there should be space and time in a library's mission and in a librarian's day to provide help to any user who needs it. The demands that are generated by computer-assisted reference are simply an extension of those generated by searches in a card catalog or any more traditional tool for the use of the library. There may be some confusion about library missions and learning when there is need to realize that there are levels to that learning, ranging from the flicker of an idea that comes from wide reading in a variety of sources to the most prosaic addition to an individual's store of information about how and where materials are located and accessed in a library's collection.

Library personnel are not always totally aware of what the full mission of their own libraries are, and they are often muddled about the missions of other libraries. When that is the case, how can a searching, learning public be better informed? One of the problems of supposedly cooperative networking is that library personnel

may set limits on what they will provide for library users, with the limits based on rather narrow interpretations of mission rather than on the range of materials and services that are available within the network for the individual user. Knowing that a user has access to a special library at work or to a school library often causes a public librarian to refer the user back to those resources without exploring the public library collection as fully as might be justified. Arbitrary decisions about what will be made available to what kinds of public also obscure statements of purpose and mission. "We don't do that for students," or for children or for nonresidents or for people who don't pay taxes or for people who cannot for whatever reason get the service elsewhere is a negative statement of mission that often contradicts the formal mission statement.

Students enrolled in formal programs of study are undoubtedly the group best served and acknowledged as a target audience by libraries in the U.S. Libraries in educational institutions acknowledge this appropriately and formally, but public libraries also devote much of their effort to service to students. Even when the library in a school or college or university states that its mission is to undergird the curriculum by excellent service to students, it may make decisions that work against that stated mission and it may need to make interpretations that extend its mission beyond that of the institution where it is located.

It is in a library's interpretation of its mission and the decisions and actions based on that interpretation that its quality is established. There have been mindless decisions that, with hindsight, have some elements of humor were one not tinglingly aware that some similar ones are being enacted today. When the "new mathematics," for example, was introduced, some school librarians ruthlessly tossed out counting books because they were seen as contradictory to the emphasis of the curriculum. Similarly, there are academic libraries that take no responsibility for providing general reading for students or faculty because their lofty mission is to provide the materials required for study and research. The fact that resident students may not be eligible to use local public libraries or that other libraries and bookstores may simply be unable to provide general reading materials for the public in the college or university is simply ignored.

Just as a mind does not grow on what is cut down to fit it--as librarians have maintained for years when

they have resisted drastically abridged or edited versions of classics--so a library does not grow or help others to grow when its interpretation of mission and of its public is narrow. There will always be tension between what a public needs and wants and what a library can provide, but the opportunities to ease that tension need to be explored more than some libraries have been willing to do in the past. A library's mission requires constant review and dissemination. If it is understood by the staff, that is helpful; if understood by other librarians who have cooperative dealings with it or by its public, that is rare but highly desirable. Incorporation of new services or technologies almost inevitably change the mission somewhat. When catalogs on microfilm or automated circulation systems call users' attention to items they might not have known about otherwise, their expectations are raised. They are more likely to request interlibrary loans or special purchases. When they know that the library uses a computer for some of its reference work they begin to think it is reasonable for their home computers to be able to communicate directly with library computers to get information they want. The library's mission usually moves in the direction of expansion, and it is appropriate that it should. Consistent review and revision of the mission are desirable.

Rather like other library protocols or policies, mission statements may be diluted if they are treated too casually and changed with too little thought. When reaching out to new constituencies or offering new services, it is probably better to err on the side of being general and inclusive rather than being so specific that some groups may get the impression they are excluded or some services beyond the range of the library.

Libraries have commitments to quality as well as missions. Here, too, there is tension. There are those who believe that, in attempting to attract a new public or to offer a new service or even to improve some aspects of service, there will be a lessening of quality. There is a widespread sense of ambivalence in libraries about the urge to be excellent and the urge to offer equitable services to a variety of constituencies. The question that John Gardner asked twenty years ago: Can we be equal and excellent too? still rings in librarians' ears. In offering special assistance to students in remedial programs, will the library be giving less to gifted students? By adding videotapes for loan, will the library be stretching too thin the already-tight budget for materials? By being more

aggressively involved in cooperative enterprises with other libraries, is there a risk of overwhelming the system with outside requests when there is much to be done in developing programs of service for the primary public?

Each library must determine its own answers to questions like these, just as each library must set its own mission. In the long run, it is the independence and individuality of the library that will determine many of its decisions, although relationships with other libraries and recognition of interdependencies with them will surely affect those decisions.

Relationship to Learning. The easiest link to establish for libraries in relation to the learning society is the direct managerial link that a number of them have with educational institutions. Libraries in schools, colleges and universities of all kinds are certainly significant parts of the educational enterprise. They become more so when the emphasis of education shifts to independent learning, the need for access to a wide variety of materials, and the need for new publics to enter education.

Recognition of the value of English in education cries out for libraries in elementary and secondary schools to be essential resources for materials that will stimulate taste and pleasure as well as develop requisite skills in reading and writing. As *A Nation at Risk* and other critiques have noted, there is a qualitative gap between available textbooks and what students should have to read. Library materials can help to fill that gap, offering diversity of reading levels as well as diversity of subject matter for students who will be expected to enhance their skills in English communication. If students are to comprehend, interpret, evaluate, and use what they read, they are likelier to do so if they are not all reading the same materials. Exchange of ideas about what is read can be accomplished even if the teacher responsible for English instruction does not know every title or has not read every book that students are reading and sharing among themselves. Many library tools in common use can suggest materials on similar themes to stimulate discussion and real exchange of information.

Writing, listening, discussing ideas call for information but, more than that, they call for differences of opinion and background, testing for authority and accuracy, and evaluation of sources. While no subject area holds domain over these activities, surely English courses and

library skills instruction are necessarily involved. Effective coordination of the provision of skills for students to work independently in these areas should be the intent, so that some instruction may come in the English program, others from library personnel, but with understanding and information shared so that the best use is made of students' time, and so that the goal of learning these skills is seen as more significant than the means of doing so.

When it comes to knowing the literary heritage and its meaning for today's life and culture, libraries again must be recognized as essential. School and public libraries probably do their most effective jobs in this area at the elementary level, when it is easier to get agreement on what is good quality material and when reading levels, tastes, developmental levels and other characteristics of the readers are likelier to be similar than they are even in secondary schools. Just as good teachers have always known about the need to capture and build on the right "teaching moment," library personnel as well as teachers need to be ready for good moments when suggestions about reading, viewing, listening can best be made.

In 1984, one should not have to point out that the literary heritage is not transmitted by books alone. There are special values in group activities, such as seeing films or listening to tapes or watching television in home or school settings that can enhance the values of the activities themselves. When there are appropriate laments about the drastic budget cuts in materials or personnel, libraries may need to turn more attention to targeting media that students can find more readily on their television sets. This is not to say that libraries should not be aggressively concerned with seeking budget improvements, but rather, that they should be sources of stimulus for students to increase their access to culture in many ways.

Library materials in mathematics and science have more often been seen as being "straight facts" than as being materials to stimulate wonder, discovery and the testing of ideas and hypotheses. One of the significant publishing accomplishments of our time has been the increase of literate, thoughtfully searching materials in the areas of science and mathematics. Unfortunately, school libraries often have not been strong in these kinds of collections because such materials are not neatly tied to the curricula of the schools. It is the rare science or

mathematics teacher who requires or permits--or perhaps even knows about--some of the materials that bring those subjects to life beyond textbooks and tests.

It may be that public libraries will have to exercise their appropriate initiatives to call such materials to the attention of teachers and students whose interest may have been stimulated by recently recognized needs for more and better backgrounds in science. A sense of the constantly developing world of the sciences may best be demonstrated in journals where new findings or interpretations are reported, but it will not be enough to add these to a subscription list without making some effort to call them to the attention of those who would be interested if they had some introduction.

There is scarcely a community that does not have some industrial or research library where science materials are the major component of the collection. Students and teachers may need to be introduced to such resources, even if they cannot or will not be regular users, to get a sense of the range and variety of materials that move the world of science forward. In a time when the most isolated person must sense some concern about the effects of asbestos poisoning, acid rain, nuclear disarmament, or, on a more individual level, the effects of smoking or drugs, the development of artificial organs, or the selection of an appropriate diet, it is clear that it is not just the college-bound students who need this kind of materials in wonderful profusion.

Libraries are in a distinctive, if not unique, position to reach all kinds of students. Those who shy away from the sciences may not realize that, if their goals are journalism or human services or any of a wide variety of careers, the time will come when they will need to understand aspects of science in order to do their work. Libraries are places where the diversity of materials and the diversity of users should provide many lively and long-term interactions.

The social sciences, happily included among the New Basics, are oriented to methods and problems rather as the sciences and mathematics are, but there is a readier acceptance of linkages with them in libraries than is customarily true in the other areas--probably because library personnel are more likely to be conversant with these fields. If the emphasis in these basics is to be on recognition of the understanding of times and places and ideas of some divergence, there should be no question that

libraries must be focal to such studies. More than that, libraries, as sites for public meetings, debates, and presentations of films and other media, should be the natural places to test the great ideas of the social sciences.

Access to computers is one of the benefits that libraries were among the first to offer their publics. Use of computers for library-related searching should be taken for granted by students as well as by other library users. In schools, locations of computers in libraries can considerably extend access to them, and payoff in immediate values should be evident. It is important, however, to see that computers are not used just as a jazzier way to acquire the same information that one might get from a search through a card catalog or an index. If that is the case, it is probably a waste of resources. Computers have the capacity to provide more personalized services, and their capacities should be extended as far as possible. Bulletin board communications via computers have great appeal for young people especially, and these can be the means of stimulating the ideas and the testing of viewpoints that are noted as so essential in the development of communication and in the building of sound ideas in the social sciences.

There has been confusion in libraries about the quantity and kind of materials to provide in foreign languages. Recent statements that English must be recognized as the major language of this country, and that proficiency in foreign languages is desirable to introduce students to other cultures, to heighten awareness and comprehension of English, and to serve the country's needs in commerce, diplomacy, defense, and education are welcome. Libraries are logical sources for the variety of materials in foreign languages that are required if the languages are to be well learned, and libraries are also the sources for many more materials about other cultures that need to be used in conjunction with foreign language study.

In some instances in the past, school and public libraries have limited their acquisition of foreign language materials to those based on a specific method of teaching or have provided general materials for non-English-speaking members of the public. The need for these materials still exists, but if libraries are to assist in the best implementation of recommendations for education, they need also to serve as bridges to English for new residents in the U.S. who may need to be stimulated and supported in their efforts to master English.

Cooperative collection development and exchanges of foreign language materials among libraries should be utilized so that the effort required to locate good library materials published in other countries can serve several libraries for the greatest economy of time and money. There is a tendency for eager readers of some foreign language materials to exhaust the collections available to them unless the collections are consistently developed and maintained with the variety and freshness that exchanges among several libraries can provide.

If the effort to create more competent readers in foreign languages is successful, there will ensue demands for library materials that appeal to these readers as part of their general reading diet. Periodicals in foreign languages are an immediate and relatively easy acquisition, but thoughtful development of publishing and imports in these areas will also have to occur if libraries are to be adequate sources for a cultured, bi- or multi-lingual public.

There is no aspect of curriculum that is not connected with libraries. Career and vocational materials and programs, guidance assistance for students entering the world of work or planning further study, and many links with the fine and performing arts are provided in libraries. In these areas, students' personal inclinations and ideas determine what they want and when they want it, so libraries are good places for them to explore the wealth of available resources. Many educational and general media provide useful introduction or background about various careers, and the linkages that libraries have established in providing access to free and inexpensive materials from industries and government agencies should serve students well in these areas. Especially in regard to information about vocations and careers, there is great need for good organization of materials for easy retrieval and location of related materials on topics that might not be first requests. For example, the high school junior who is considering a career in health care may need to be encouraged to explore dietetics or industrial hygiene as well as the more traditional nursing or medical careers. Informed library personnel and well-organized, current collections are essential to assist in making these connections. Good relationships with guidance personnel in educational institutions are also essential for libraries if these needs are to be served.

In referring to all the good basic learning that stu-

dents should have before they enter secondary schools, *A Nation at Risk* observes that, "These elementary years should foster an enthusiasm for learning and the development of the individual's gifts and talents." (p. 27) There could scarcely be a better definition of what can occur when elementary school children develop early and lasting pleasures in libraries. Planned visits by classes to the school or public library are only the tip of the iceberg. Access to a library for quick research or sustained effort in work on a project and acquaintance with libraries and their contents from early ages are among the rights of every child. Unfortunately, just as federal funds in the mid-1960s gave elementary school libraries their biggest boost ever, the withdrawal of support has had drastic, tragic impact on these programs.

It is not easy to prove that elementary school libraries in themselves have a major effect on the children who have access to them. In a way, the libraries have been doomed by their successes. Where schools have invested wisely and well in the instructional program, elementary school libraries are part of it, but then all the good components of instruction combine for excellence, and, by corollary, when good school libraries are missing, so are the other components of instruction that are essential for excellence. Starving libraries take a long time to die, and in elementary schools, where the need for current materials may not be as critical as in some other settings, students and teachers can survive for some time on a library collection that is not being sustained. But time is running out in many schools where this is the case. These libraries need to be revived, notably with personnel who can conduct sound library programs, as well as with materials.

Having noted that many libraries have their impact on learning whether they are located in educational institutions or not, we should also comment on whether they are primarily places for information or not. They must be both more than information places and less than information places. If information is taken to refer to all the resources that inform and inspire, stimulate and satisfy, offer questions as well as answers, then surely libraries are information places. But they are not merely locations where individuals or groups visit or call to add facts to their collections. Each library makes a slightly different decision about the extent to which the user must find information contrasted with the services provided

to make information in the broadest sense accessible.

Questions about the extent to which library users are or should be independent in their use of libraries will probably be with us as long as there are libraries and users. Here, too, each library has some mix of responses. There may be telephone connections in the stacks of university libraries where people can get a quick answer on directions, just as there are in many public and special libraries telephone reference centers where questions are answered within the limits of carefully selected reference resources. With the technology of the telephone, tapes providing brief definitions of medical treatment or information for tenants or owners of pets have been developed in many libraries. However, it is frequently true that easy-access reference is not provided as readily to students as to other members of the public. The joke about the student who calls to ask for definitions of ten words--evidently part of a homework assignment--and finds he can get only five at a time concludes with his outwitting the librarian by making as many additional calls as necessary.

What this points up is the need that cannot be noted too often: libraries need good, consistent rapport with the faculties of schools so that students' requests can be meshed with those from other parts of the public, and so that the purpose of homework assignments will not be lost by having too ready assistance from a librarian provide answers when it was the method of finding those answers that was one of the goals of the assignment.

Twenty years ago, heavy student use of public libraries for school assignments was so overwhelming that it was a major focus of an annual conference of the American Library Association. Since then, the dwindling emphasis on homework has virtually eliminated the problem in terms of heavy demand. However, if recommendations from current educational critiques do lead to increases in homework assignments, the problem could be with us again, and larger than ever. Since the number of elementary and secondary students who attend schools in neighborhoods other than their own is large and evidently growing larger, the libraries in their communities may be ill-prepared with either information or other resources to assist them in their required studies. This points up the need for coordinated response among libraries to the recommendations being implemented to improve education. Every kind of library may need to be alerted to the quests that students will undertake if truly creative, demanding homework assign-

ents are made. The purpose of those assignments will be thwarted if a few parents, for example, simply transmit the request to the special librarians in their places of work and carry answers or materials home. This underscores the need for all libraries, all librarians to be aware of the purpose of school requirements and committed to assisting in the most appropriate ways--which may often mean saying, "No, you may find that yourself," and, when necessary, providing the clues or guidance that makes the finding possible.

The need for excellent reference skills among library personnel (not just among librarians) is critical when school assignments are being considered. Interviewing, interpreting, listening, and trying out possible solutions are all part of the reference encounter. In recent years, fortunately, there has been more emphasis on these skills in the education of librarians. Unfortunately, there has been less emphasis on the need to know materials and to access them rapidly and well. In some instances, the prospect of referring users to other libraries has caused librarians to do that rather than to pursue elusive materials in their own libraries.

Studies have been made of when the "end user" (i.e., the individual who actually wants information or material in a library) should use libraries' various technologies independently and when it is more cost-effective or efficient for a library staff member to conduct searches in data bases. Historically, this controversy repeats one that raged when the first libraries opened their stack areas so that users could enter them. The stakes are somewhat higher now, because access to many data bases is expensive, and wasted time counts heavily in telecommunications costs as well as in computer time and the time of the user and others who may have to wait for access. Until computer proficiency is more widespread, library personnel will have to conduct many searches for users, but the tide of demand for independence and the ability to exercise that independence are sure to rise. The people who joked once about replacing librarians with little black boxes may sense their jokes coming true. In the real world, however, there will continue to be need for some time to come for guidance from library personnel about access to data bases and, perhaps equally essential, assistance in interpreting and using what is located there.

Publics Served. Among the things we know for sure

when we deal with a learning society is that learners will be diverse in age, background, size, competence, and willingness to work to achieve their learning goals. Equally diverse are the means of achieving those goals. While some libraries--often community college and public--provide television monitors for students pursuing individual courses of study, there are others where reserve or reference collections, pamphlet files, and listening rooms provide a part of the response to the public's learning needs.

There is considerable overlap among these publics, and this is likely to increase. As high schools respond to criticism of course offerings, they send busloads of students to community colleges or universities to take laboratory sciences in appropriate settings. Does the student then have to use the high school library for most courses, but go trailing back to the post-secondary institution for course-related materials there? When large numbers of students are involved, it is probably the library in the high school that should adjust and provide the required resources, but that may not be true when two or three computer geniuses from that same school take individually tutored classes at another location.

Adults returning to school may be willing to drive miles for the courses they want once or twice a week, but it has been effectively proved that they will not make additional trips to use the libraries at those same institutions. They may seek resources from libraries nearer where they work or live, regardless of the missions of those libraries. When libraries can readily meet such needs, there are no problems, but when special materials or equipment are requested, the students may have to go elsewhere to satisfy their needs. This is an area in which more aggressive cooperative efforts could have many good effects. Too often, a request from a student is discounted simply because it originates with a student. Competent assistance in the library may result in finding appropriate substitutes, and even more imaginative responses may lead to the establishment of mini-collections from the college or university library to satisfy such demands.

The libraries in educational institutions may have no direct way of knowing that students in their programs are making demands on other collections. The value of a well-used network of communications among libraries in a geographic area is that this kind of use can be reported and ways to address the needs can be discussed before the problem becomes too large or widespread.

The mobility of faculty is another part of the picture. In some schools, the end of the school day signals a total exodus, and few teachers frequent the school library before classes begin. A teacher in an inner-city elementary school commented to me at a workshop where many relevant books were displayed that she had no idea there were so many good materials she could be introducing to the children she taught. She had been regularly borrowing materials from the suburban public library near where she lived without ever finding stories that would be successful with the children in her school. Had she asked for assistance? No. Had she gone to any library in or near the school? No. Would this mismatch have gone on forever if she had not happened to attend the workshop? Alas, perhaps it would.

This also means that any library that serves an unselected public needs constantly to identify its users and their needs in order to provide the best service. While there are good sources for strategies on conducting library community surveys, shrewd observation and open communications with the public can provide much useful information. A public transportation transfer point may be relocated, a school may change its time of closing, or a college extension course may be scheduled in a different location--and each has its impact on library use patterns. Knowing the public in order to provide better service does not just mean learning a few names of regular users. It also means finding out more about where they come from, what their time pressures are, and how these and other characteristics may affect their use of libraries.

There is one group in the library public that may need more focused time in the library. These are the latch-key children, an increasingly large number of children of school age who are on their own from the time school is out until parents or responsible adults return home for the day. Several studies of this group of children have presented information about the loneliness, fear, and potential dangers they feel or create. Several of the studies have concluded that what is needed is a community institution that will permit the children to come in, perhaps registering so that their parents will have some record of where they are, engage in activities or read, and leave for home after a few hours. This is practically a description of the public library, but the longstanding resistance of children's librarians to serving as quasi-babysitters is the major obstacle toward working out some reasonable program of services for latch-key children. It may be

that longer school days, as proposed in *A Nation at Risk* and elsewhere, will alleviate or resolve this problem. If not, it is surely one for more careful study and action by those who would lead public libraries into new social responsibilities.

The joining of efforts to provide better service from all kinds of libraries begins with communications, an increase in understanding of other kinds of libraries and their missions and resources. Newsletters or bulletin-board use of computer terminals among libraries can supplement telephone communications, but somewhere in the planning, meetings, preferably held in some of the cooperating libraries, or scheduled visits should enhance interests and potentials for cooperative service to the learning society. It is more complicated than most people realize to plan a "librarian-for-a-day" activity in which library personnel exchange locations for a day, but it can be a most productive experience. Actually having to use the collection in another library and to recognize some of the problems it or another kind of public can create can do much to increase understanding of other libraries. From the understanding comes more effective cooperation.

Planning for any large-scale or long-term cooperative venture, such as a delivery system or automated circulation control, requires communications on many levels. It is difficult to keep all levels of staff within one library or system informed, and increasingly complex to see that decisions are made at appropriate levels and communicated where and when they need to be known. Totally open communications, with whole library staffs speculating on when bids will be opened or who will win out in the matter of getting morning rather than afternoon deliveries, can be destructive. Communications need to be managed just as libraries need to be managed.

School libraries are traditionally the last type of library to be included in any multi-type cooperative of libraries, and this also means that they often come in when the initial bursts of enthusiasm and injections of funding have passed. Often, school libraries are deliberately delayed when they request access to systems, because of two stereotypes that still prevail: all school library collections are alike, so they won't have much to offer, and school libraries are self-sufficient because of the limited demands made of them. Neither of these has much validity today, but the stereotypes persist. A major effort needs to be made to stimulate and assimilate school

libraries to be active parts of formal cooperative efforts among various types of libraries.

GOALS AND EXPECTATIONS

As has been discussed, libraries have individual missions, but there are overlaps in the kinds of collections and other resources they have to offer, as well as in the publics they serve. Planning of libraries has been encouraged, but, on the whole, it has not been effective, and current fiscal constraints have further limited good planning.

Evaluation of Libraries. Judging what is good about a library is somewhat more difficult than judging what is good about a school. There are many focuses of interest, many kinds of services--to individuals, to groups, to the community beyond the library--to explore and to evaluate. One of the most promising suggestions of recent years has been that libraries should be evaluated in terms of what they do rather than what they have. While it is certainly true that libraries without resources of many kinds cannot provide for their publics' needs, it is too true that libraries may have resources but not display or utilize them effectively, perhaps not even have the resources appropriate for their public.

No statement of standards for libraries has ever been ideal. There is, first of all, discussion about whether standards really are minimums or optimums, whether any library meets them if they seem too high, whether they are worth considering if they are too low, etc. And yet, there is a certain reassurance in counting things: books, people, transactions, chairs, hours. Some standards and measures are essential if librarians are to be able to justify themselves in budget discussions or to describe and compare themselves adequately when considering cooperative efforts with other libraries. Designation of a library as a good one to turn to when others have not been able to fill a request requires recognition of the quality and quantity of resources that make it a good prospect when other library resources have been exhausted.

When determining the extent to which libraries really serve the learning society, however, evaluative techniques must consider the extent to which libraries stimulate as well as satisfy their publics. A library that appears to be

totally self-sufficient may disappoint its users more frequently than one that regularly calls on other libraries for assistance. The learning society demands libraries that lead to other resources and that establish the connections that people need to utilize them. These connections may be truck deliveries of interlibrary loans, telephone responses to questions, or computer linkages with data banks.

It is practically axiomatic to note that library users who are accustomed to good service and at least adequate resources are more demanding than those who have no idea what a library can provide. User satisfaction, in itself, is not an adequate means of evaluation, but it does give some useful clues for assessment.

Planning. Short- and long-range plans for libraries abound. They are not of uniform quality, but long-range plans are more likely to have been prepared and to be of fair quality. What tends to be lacking is a relationship between plans and reality, a charting of steps to be taken to achieve the goals of the plan. Almost every kind of library would benefit from reviewing or writing such plans anew. Doing this at a time when the need for libraries to be recognized--and to recognize themselves--in relation to the learning society could well lead to clearer recognition of what libraries need to do to serve better the needs related to learning.

Only by planning and comparing activities with timed goals can libraries get a sense of what they are really accomplishing. Often, there are ideas afloat to the effect that public librarians will visit schools regularly. Without a plan and a record of when such visits were made, too often the time between the visits extends for longer and longer periods. Some services may be seasonal, but they need to be planned well in advance, and, when they involve other libraries or educational institutions, those schedules and priorities also need to be part of the plan. Some efforts that may initially appear to be uncoordinated can be repeated and offered again until they become parts of significant coordinated efforts.

A public library supervisor of children's services, for example, was constantly annoyed that she was not invited to speak at the first public school teachers' meeting of the fall. She and her colleagues offered to speak to faculty meetings in every school instead, a practice which seemed to be redundant, but which was widely welcomed. The school library supervisor invited her public library

colleague to the opening meeting, and the visitor's eyes were opened to the problems of information overload. When eventually she achieved her goal of being on the program, she continued the well-established practice of talking to faculty in their own schools, where questions and discussion flowed more freely, and where a more personal relationship could be achieved.

Coordination of Libraries in Systems, States, etc. Cooperative accomplishments among libraries are matters of history and current accomplishment. Most of them have been achieved by moral suasion, with libraries combining forces to improve or extend services. However, many cooperative efforts have been strongly supported by funding patterns that have rewarded those libraries willing to cooperate. State library agencies, for example, have sponsored workshops on better supervision of personnel bringing together directors of small and medium-sized public libraries to stimulate more cooperation among them, or they have offered computer terminals to libraries that will sign on for a common circulation system. Cooperation has certainly thrived in atmospheres like these.

Coordination is something else again. What is often missing in cooperative efforts is real coordination so that services and resources are planned as efficiently as possible. When funding has been the carrot that encouraged cooperation, withdrawal of funding for whatever reason has all too often been the cause for stoppage or slowdown in working toward a common goal. Coordination implies leadership and a recognized direction of effort. These are not always present in the simplest cooperative efforts.

Well-established systems of libraries are coordinated efforts. A problem that has beset libraries through all time has been that each library needs to be small enough to be manageable, and it needs to be linked to other libraries, but if they are only similar small nodes in a network, they may not offer real strength. Coordination of effort means that some activities and resources may be divided among the libraries, some agreements reached about what will be borrowed and loaned. Government document collections, for example, may have developed in different depths in different locations, but an information service can call attention to those government publications that would be "good buys" in other locations.

One of the best benefits of the Library Services and Construction Act was the strength it offered to state

library agencies. Not all have had long-term success, but many used that period of growth to become forceful advocates for library development in their states and real coordinating agencies, providing the stimulus for reference networks, relationships with library education programs for pre-service and in-service education, and leadership in planning and evaluation of library service throughout the state.

There is a dark side to this picture. Often state library agencies have no rapport with school libraries within their states. Or the rapport may be informal and fairly ineffective. This has often been a barrier to truly effective coordination of planning among all types of libraries within the state. While it is desirable for school library consultants in state agencies to be associated with the education branch of state government, they need to have the freedom to work across agency lines to establish good liaison with state library colleagues. In some states, where the state library agency is housed in the education unit, this effort still needs to be made because school library consultants or supervisors are in another part of the unit. There is some irony in the fact that when state library personnel were fewer, they were often better able to keep in touch with colleagues and to work toward common goals even with resources more meager than those available to them today.

Constraints. Problems of turf, as suggested above, are constraints on cooperative effort among libraries and can be problems even in the provision of services to individuals. It is not uncommon for libraries within the same cooperative system to have conflicts about which one can better serve a community that lies on a mutual border. There are instances, too, when the cooperative system can result in poorer service to areas that are not initially well served. If, for example, a neighboring public library offers excellent resources, many residents of a community with more limited library service are attracted to the better library. The losers, in the long run, are the residents of the community with the poorer library who do not have the means of transportation or the personal drive to stimulate them to go where resources are better. There was a time when, in a situation like that, those with drive would turn their energies toward improving what was theirs. Now, with cooperative systems and reciprocal borrowing, there is less incentive for this kind of leadership. And

often it is the school population who suffer most, because children are more limited in where they can travel and students in high schools may not have the time or transportation to go beyond their own library.

Just as the attitudes of leaders in librarianship led to the development of good cooperative systems, it is attitudes of librarians and others that place constraints on them. Reasons or excuses for not linking resources with other libraries can be based on apparent strengths as well as weaknesses. Some library personnel assess their own views of what is right for the patron rather than exploring a patron's real need and interest. The stories of libraries that refuse to request an item on interlibrary loan because they do not wish to borrow from a smaller or less prestigious library are not just apochryphal. The directors or trustees of those libraries may not even be aware of value judgments made by members of their staffs, but that does not help the patron who is caught in a kind of power squeeze.

Lack of financial resources is the most significant constraint on the ability of libraries to achieve their goals and expectations. This also results in a malaise among library personnel when their problem is not lack of imagination, will, or competence, but rather the lack of resources to provide the best services and materials to their patrons. When limited finances also result in limited personnel--both in the sense of numbers of people employed and in the quality of staff available to work for low salaries--the role of librarians as advocates for better service and as designers and providers of that service is diminished.

COMPONENTS OF LIBRARY SERVICES

The services that libraries offer to the learning society are determined by the amount and kind of personnel, materials, and physical facilities that can be deployed to provide those services. To these traditional components of service must be added one that cuts across all of them and that can increase their individual strengths when well utilized: the linkages among libraries.

Personnel. The people who provide library services are not all direct providers. The quality of service is determined by those who make decisions about the layout

of physical facilities as well as by those who decide how many subject headings will be permitted for accessing juvenile materials. Michael Buckland has commented on the "bitterness" of librarianship, and this may apply to the need for concern about what may appear to be minor details as well as to the fractioning of library personnel into many different specializations and competencies.

Librarians form the major professional component of library service, but among their professional colleagues in libraries are public relations specialists, personnel officers, accountants, and others. In public service areas, librarians are assisted by other specialists as well as by a variety of personnel including technical assistants and others who perform the myriad tasks of library service. Librarians are most likely to have had the humanities, social sciences, or education as their college specializations. As a result, high value is placed on librarians with strengths in the sciences and mathematics. As school curricula emphasize those areas more, this value is likely to increase. Understanding the structure of a discipline is essential if one is to provide the best library service and resources to students in that discipline, but the real specialization in librarianship is in the identification, organization, and implementation of resources in a variety of disciplines. There is also need for people who can work well with diverse publics, interpreting people as well as library resources in order to bring the two together to best effect.

Library personnel are usually public employees. Their numbers are not always sufficient in terms of service needs, even when there are limited opportunities for employment. Their orientation toward service also means that they may accept positions with salary and status far inferior to the levels their education and competence should demand. If anything, their salary and status, on the whole, are on at least as low a level as teachers, but, because in any community, they are likely to be fewer in number than teachers and difficult to classify in collective bargaining or other pro-active groups of public employees, they have usually been ineffective in improving their status. Add to that the fact that, with positions being more limited because of fiscal constraints, some library personnel are willing to work for far less than appropriate compensation, and the best and most promising newcomers to the field may be irresistibly drawn either to the more entrepreneurial parts of the profession or to other fields, so there is

a lessening in quality of personnel that causes the cycle of low pay and low status to reinforce itself.

Many libraries have long traditions of use of volunteers, and their contributions to librarianship need to be recognized and appreciated. There are many kinds of work for volunteers to accomplish in libraries, but ideally, they need direction, coordination, and opportunities for education to perform at the highest level possible. Investment in volunteer programs can be another cooperative effort shared by several libraries. This is not to say that volunteers cannot carry major responsibility for some programs. Tutoring programs in public libraries targeted for out-of-school adults as well as for students have benefited from the work of volunteers. There is considerable appeal in working with adult illiterates, but often more skill and patience are required than are first apparent. For these roles also, volunteers need to be carefully selected and provided with the resources they need for success.

Materials. Collections of library resources are characterized by their diversity in formats, levels of difficulty, and organization. The content of collections is affected by many external factors, notably the budget available for purchase of materials and the space to house them, but also by availability of materials in other centers. Reserve collections, for example, in many academic libraries have been transformed as paperback books have become more readily available in bookstores, but increasing costs may cause a shift back to the library's providing many titles in considerable duplication.

Every library balances needs that are immediate with those that are either less obvious or deferable to some other resource. Providing materials for students usually carries the requirement that many items should be available to circulate, but that may work against the research and reference needs of other groups in the academic community. Libraries have often taken the stance that they must set limits on materials purchased for general collections in order to serve scholars in the community more effectively. And yet, much of that service to scholars may consist of steady interlibrary borrowing from richer, more relevant collections.

Serial publications are like anchors of the library collection. Essential they are, but their sheer weight and the commitment that libraries tend to have toward continuing what has been begun have caused larger and larger

percentages of library budgets to be devoted to their maintenance. Even their housing and physical arrangement raise some of the toughest questions about library collections. Ought they be kept as separate items for multiple access or bound or located together in what may appear to be more logical order? While photocopying has eased some problems of access to journals and other serial publications, and considerable improvements have been made in indexing and providing subject access to them, serial publications are a resource that the learning society recognizes as essential without being near anything like agreement on their relative values.

Computer software, videodiscs and videotapes as well as more traditional media are especially significant in libraries serving students. Even libraries that pride themselves on being organized in orderly subject categories usually make exceptions for some collections to be by format. One reason that students especially need orientation to specific libraries in addition to overall information about how to use libraries is to call their attention to such variations in access. If libraries are to participate in the cultural awakening of students as well as in other aspects of their education, they must also provide either in the library or in some convenient location opportunities to use the varied media they include in their collections.

In educational settings, libraries usually benefit from recommendations for purchase from various parts of the user community. Selection is not exclusively, nor, in many instances, primarily the task of library personnel. Their task is to develop cooperatively with the community the policies and guidelines for rational selection of materials. Collections that do not include some materials that offend some people are probably not providing the ranges of opinion and the variety of formats that a learning society should demand. The biggest impediment to collections that stimulate ideas is probably the selector's fear of being responsible for purchasing and providing what may seem less than "safe." Thus, high school students are delayed in their encounters with adult materials, and elementary school students find nothing that is controversial on their school or public library shelves. Libraries need occasionally to remember that it is ideas, not things, that are their content.

Physical Facilities. Libraries are places. Because they are, library personnel who are responsible for them have responsibilities different from those of teachers who are

more like tenants than proprietors of classrooms. Libraries require different kinds of space for materials and people and their various kinds of interaction. Even the most limited branch of a public library may be expected to offer some reference services, some space for quiet study, a place for a conversation among students, and a place for library staff to work. On larger scales, demands for all these activities and for access at round-the-clock times are considerably increased.

Libraries in educational settings need to maintain their close associations with the rest of the institution as well as an atmosphere that is conducive to the best use of the library itself. The problems of discipline and community malaise that affect education today are highly visible in libraries, too. In an ideal society libraries would be pleasant communal gathering places. The fact is that, because they are often large and impersonal, and because they have no single place for the focus of attention (as laboratories, for example, are more likely to have), libraries may exemplify the worst of settings when they become gathering places for gangs or are divided up into units of workers, drones, and mischief-makers.

Libraries have long since given up the pretence of being quiet places. Library personnel today probably spend more time defending the need for the noise of business (copying machines, computers, typewriters, seminar rooms, etc.) than they do insisting on relative quiet. In any accessible setting, either within a larger building or in a building of their own, libraries must have good traffic patterns, and when well planned, these can encourage better use with less noise and fewer discipline problems. Library hours typically are far longer than those in the instructional programs they serve directly or indirectly, so the facility needs to allow for individual use with some personal security.

Linkages. Linkages among libraries include formal compacts as well as casual, friendly telephone conversations. Essential to them are mutual understanding of various libraries' goals and priorities. The exchange of information and material is probably the most visible, most customary result of linkages, but communications through microcomputer "bulletin boards" and cooperative decisions for some libraries in networks or consortia to take special responsibility for some areas of collection development are becoming increasingly common.

Communications among library personnel should include discussions of common concerns or problems, not just accounts of solutions. Sharing of personnel is probably one of the under-represented aspects of cooperative linkage, but one that needs to be explored and developed. As some age groups within the learning society decline in proportion to others, it makes sense for library personnel who are age-level specialists to serve in more than one location or library so that access to their special competencies is as available as possible to the public that needs them.

In order to call to public attention the accomplishments as well as the needs of libraries, linkages need to be maintained so that the library community can speak effectively for itself. There are constant shifts of alliances in regard to public policy, including legislative development. Libraries may need to band together to assert the right of a public librarian to place on general shelves a title that is considered highly controversial by some people in the community, and they may also need to combine forces to speak to the need for maintaining fiscal support for school libraries within a community. Other issues, such as response to monopolistic practices among library suppliers or questionable pricing by library jobbers, also must from time to time be addressed by libraries. Library associations at any level cannot carry these burdens alone. As the communication systems among libraries become more sophisticated, so may the abilities to represent library concerns effectively to the public at large.

LEALERSHIP IN LIBRARIANSHIP

Librarianship is strongly oriented toward service, toward practical solutions, and toward the present. Its leadership needs to question these orientations by challenging some emphases and by looking toward both past and future for better models and new or rediscovered ideas. It is intriguing to note, in a profession dedicated to providing resources for others, that it is sometimes easier to repeat an experiment and to announce the "new" finding than it is to persuade library personnel to search for solutions in the literature that is a part of their stock in trade.

Educational Programs for Librarianship. The major sources for library personnel are library education programs. Most librarians possess masters degrees in librarian-

ship, but there are variations in professional requirements. There has never developed the career ladder that many people thought was promising where an individual might move up through various technical levels to achieve education as a librarian. This is primarily because there is widespread belief that the best educational background for librarians includes the broadest kind of undergraduate education capped by a masters degree in librarianship.

One effect of this is that most library education programs are free-standing masters degree programs in colleges or, more often, universities. As such, they are lacking in the numbers and the clout that would make their institutional identity clearer and their existence more secure. Having decided that undergraduate education in librarianship was, for the most part, inappropriate for the profession, education programs and the American Library Association, the accrediting agency for all programs in the U.S. and Canada, went rather systematically about the task of creating these fragile masters degree programs. Budget crunches of recent years have called attention to their vulnerability; some have already been wiped out, and more are likely to follow.

There has always been some concern about whether school librarians are part of this same educational program for librarianship or not, and the debate rages anew as the library profession pores over *A Nation at Risk*. Historically, many school librarians entered that field of librarianship after some years of teaching, and their allegiances and many of their strengths lay in teaching. As school librarianship needed more people, many came to it from library education programs, having achieved the necessary state certification as teachers, usually by combining education courses and library science courses. Often, library education programs have tracks for students wishing to earn school library certification, but it would seem to be inappropriate to return to school library education programs housed exclusively in schools of education. It is bad enough that school librarians are often excluded from other mainstream library concerns such as networking. To exclude them from the outset of their professional education would be a mistake.

In what now seems to have been the high tide of library education programs in the late 1960s when they were more numerous and stronger, the promise of having library education at the masters level within easy geographic reach of all comers seemed to be on the verge of

achievement. There has always been a conflict between having library schools become special in their directions and having them provide appropriate general library education programs for a geographic area. They are by no means evenly distributed across the country, and some have created pockets of underemployed librarians because place-bound graduates have clustered near their alma maters. There is limited evidence to support the idea that people will decide, in any significant numbers, to relocate at considerable distances to attend the library education programs of their choice.

On the other hand, too few library schools are willing to admit that there really are career plans they do not serve well. Although ALA accreditation requires special or single-track programs to designate themselves, it does not require programs of limited offerings to state they are not appropriate for all fields of librarianship. Fortunately, many students entering library education programs are embarking on second careers or additional degrees, and they usually have the ability and experience to determine for themselves how to design programs and select courses that suit their purposes. What they more often do not know for sure is the wide variety of opportunity librarianship offers, so they may prepare with too narrow a view of the field.

There is another problem related to the fact that many librarians come from other careers. Often, those careers are in teaching, and in some instances, especially in recent years, doctorally-prepared potential faculty members have found librarianship a refuge from their own crowded fields. In their earnestness to identify themselves as librarians and perhaps in relief in having left teaching, many librarians eschew any activity that smacks of teaching. They have been encouraged to become tutors in libraries, to offer literacy programs to adults, to serve as teachers in various ways. And, usually overwhelmingly, they have responded in the negative.

School librarians have been the notable exception They are in many instances directly involved in the teaching process, meeting classes on a regular basis, supplementing classroom study with appropriate presentations on research, giving book talks as classes begin wide reading, presenting media related to the instructional program. And, in a more recent enthusiastic move, academic librarians have become more active as teachers of library skills and research. Notably missing are library educators,

who might serve several purposes by taking more responsibility for introduction to research in undergraduate programs, and who could thus build a strong base for the masters degree programs with which they are associated.

Research. A characteristic of American professional development has been the constant testing of its research and innovations against the practice of the field. Actually, this has often meant that research has justified or codified innovation rather than stimulate it. Thus, ideas about better outreach programs in public libraries or how to conduct reference interviews have usually been based on observation of practice, the gathering of many comments and recommendations, and reporting them to a wider audience, rather than on the development of ideas in the abstract and dissemination of them as responses to a commonly recognized problem.

Some of the best research about librarianship has been conducted in other fields, such as education, history, or human behavior. Within librarianship, researchers who are recognized as leaders in the profession are more likely to be recognized because of their activity in professional organizations or their more popular writings directed to practicing librarians, than for what they consider their best research.

Combined with these as problems is a mistrust on the part of librarians for research in their fields. They look askance at library history and thus doom themselves to repeat some of its wackier mistakes. They question studies that cannot be replicated and are reluctant to replicate ones that are meant to be tried in other settings. By and large, they do not engage in, read, nor benefit from research in their own field.

It may be a forlorn hope, but it does seem that the way to improve this situation is to stimulate better communication and sense of purpose among library educators and their colleagues in the field. While awards and seminars devoted to research have increased in recent years, they have not yet had significant positive impact in increasing either the quality or quantity of research. And the spurt of numbers of librarians with doctoral degrees that came in the past fifteen years appears to have subsided without dramatically increasing the number or the quality of library researchers. Too many of these people have been caught up in administrative posts, where the doctorate is highly desirable in some areas, and they

have not been able to follow their own inclinations or to build on ideas they developed in doctoral research.

Communication among Librarians. Especially when networking and other cooperative efforts are the topic, the communication channels used by librarians warrant some emphasis. A major channel, often disregarded, is participation in organizations. There are library organizations at many geographic levels and ones where people gather according to type or size of library as well as ones where members are from the same areas of specialization within librarianship. These organizations provide channels for communication and ways to deal with mutual problems; they offer a path to leadership for librarians who may feel frustrated in their jobs, especially as job mobility is more limited; they provide a way to express to a larger public the common concerns of librarianship in areas such as intellectual freedom, legislative needs, general public support, to name a few.

Library organizations appear to be the likeliest ways to make different kinds of librarians aware of other kinds of libraries. Ideally, librarians should belong to a mix of the organizations: one or two toward which they have more to contribute than to gain, and one or two from which they stand to benefit rather than to give. Also, some should provide them reassurance by giving a sense of unity of purpose with others like themselves, while other groups introduce them to colleagues whose goals and jobs may be vastly different. What better agencies could there be to sponsor librarian-for-a-day exchanges or discussions of different career paths or different ways of dealing with problems?

These references to library organizations are to local, primarily social gatherings as well as to national or state associations, which may be highly structured. Library school alumni organizations may be among them, and so may users groups as those using a bibliographic utility or other cooperative service gather to set policies or to be instructed on what they are sharing.

Library periodicals do a good job of linking the field, although they, too, are sometimes divisive, with some groups of librarians avidly reading journals whose titles are scarcely recognized by other groups. Theme-oriented issues appear to be becoming more popular, and these may further divide the readership, with hospital librarians, for example, reading only the issue of a journal that is

devoted to their special concerns. The economics of journal publication seem to be melding the characteristics of monographs and journals in professional areas, and the impact this may have on communication among librarians promises to be interesting to watch.

ISSUES

Many challenges have been offered to librarianship, and nearly all of them relate to the needs of the learning society. The nature of librarianship and those engaged in it makes it more inclined to find common causes than to identify and to deal with issues. As a profession of generalists, librarianship offers scope and space enough that one may spend a lifetime in it without dealing with some of its major issues. This is not to say that one may not have been affected by them, but often it is the symptoms of the issue, rather than the issue itself, that most affect the individual. For example, as has been noted, "safe" materials are regularly purchased and those that might be questioned (note the "might be") are not purchased. While the issue is censorship, it is the prospect or possibility of censorship, rather than the actuality, that drives the softer decision. Nonetheless, there are issues that need to be noted so that they are parts of the discussion of libraries and the learning society.

Libraries Are Reactive Rather Than Pro-active. To some extent, this characteristic is appropriate. Libraries can probably best shape and serve the societies where they are located by responding to them. To be reactive does not mean the same thing as being passive, but it does suggest the need to acquire information before mounting campaigns or initiating services. Libraries are at their best when they are doing that. Perhaps more important, they should be setting their goals and determining their programs in accord with the distinctive needs of their communities rather than in imitation of successful libraries elsewhere.

Community Focus vs. General Scope. It is foolish to believe that libraries must be distinctive in their selection of what will best serve their communities when they are, after all, drawing on the same generally available materials for their collections. Libraries need to recognize their

obligations to the communities they serve as well as their relationship to a broader society. In providing service to a learning society, for example, libraries cannot wait for the community to formulate its needs or to outline its plans. The offering of some services should lead to the demand for others. Sometimes, this may be fairly direct, as when adults working to achieve high school equivalency come across media that help them with one part of the curriculum and find in them references to other media in other subjects, and the library assists by locating and providing that material.

Varying Patterns of Communication and Organization among Librarians. Because librarians are employed in different settings and sizes of libraries, their means of communication and observation of each other are considerably varied. Many impressions of the quality of colleagues' leadership are more likely to be based on observation at professional meetings or classes than on seeing what the person is like at work. On the other hand, in libraries where a number of librarians work together, especially in public service, they are likely to be a close-knit (if not always mutually respectful or congenial) group with strong senses of one another's strengths and weaknesses. Their interest in organization extends to organizing themselves, but there are issues here, too.

How effectively have librarians, with all their organizations, presented the case for appropriate salaries and prestige? They have been far more occupied with dealing with the need for more money for resources or campaigns to keep costs of materials low. Their organizations need either to become somewhat more militant and informed concerning needs for salary and status improvements, or to yield to organizations such as unions that may address those needs more successfully. The apparent failure of the continuing effort to have librarians in the federal government continue to be classed in appropriate professional levels occurred in spite of hasty alliances among library groups and consistent effort on the part of some librarians and library leaders.

The formal literature of librarianship, as has been noted, has changed, for the most part for the better, in recent years. One of the kinds of material no longer so easily accessible is the "how-we-do-it-good-in-our-library" report. However, some reports of this kind are needed to address current concerns of the learning society. It is

not always new information or hypotheses that are needed; how ideas are implemented, evaluated, and maintained in practice also needs to be documented. It may be that in this regard, librarianship has thrown out the baby with the bath water, and needs to encourage such documentation.

Another result of more emphasis on librarians as published writers (partly caused by the maturation of the profession, partly by tenure and promotion and other status requirements in libraries) is that it is not as easy to obtain by purchase or loan such materials as libraries' reports, policy statements, manuals, etc. One reason suggested for this curtailment is that the people who produce the materials are retaining them as evidence of their scholarship or service, rather than sharing with others.

Social Environment Factors and Libraries. Libraries are social as well as educational institutions that must respond to many factors that affect the social environment. The composition of the population, for example, with increasing portions of it among the aging, affects librarianship not only in changing the composition of its user groups, but also in reflecting that changed composition among those who work in libraries. Patterns of advancement cannot be determined from observation of people who have preceded younger colleagues. For entire careers, some of the most promising recruits ever attracted to librarianship will be struggling within the overpopulated "baby boom" group, and their opportunities for leadership will never be what they deserve. Ironically, the thinner ranks of their seniors include many people who have been thrust into leadership roles for which they are poorly equipped, but who are unlikely to yield them to junior colleagues.

Strategies that have worked well with some age groups in libraries need to be evaluated for their extension to others. Facile judgments about adapting techniques that worked well with groups at one age level to working with other groups--e.g., providing programs for senior citizens based on techniques used with children--are usually wrong. Demands for group activities in libraries need to be weighed against the needs to provide space and time for individuals on some equitable basis. The learning society needs individual attention as much or more than it needs group programming, but it is easy for the individual to get overlooked in planning.

Library service to minorities has tended to be among the newer emphases of libraries, often supported with "soft money," and most endangered when budgets are cut. There is probably no strategy of service to minorities that is good that is not based on generally sound library theory and practice. Recognition of minorities as major potential users of libraries is fairly general. Orientation of services to attract them both as library users and library supporters requires some reallocation of resources, but the emphasis should be on integrating services to minorities rather than leaving them as vulnerable, high-unit-cost recipients of library service.

Service to Specific Groups vs. General. If the enthusiasm to serve the learning society in libraries results in many targeted programs providing for students (or, worse yet, some classes of students, such as full-time or college-bound or gifted), the results may be disappointing if not disastrous. Arbitrary determinations of who is entitled to what services work against effective library service to the learning society. While it is difficult to identify major needs for the improvement of library service on an overall basis, and even more difficult to evaluate such improvements, it is broad-based improvement that will, in the long run, be most effective in making libraries significant in the learning society.

Relationships to Instruction. Library programs need to be based on information about what instructional programs are without being limited to providing only for narrowly defined instructional requirements. Undergirding the curriculum is a long recognized function of school libraries, but it is not their only function. Collection development, services, and facilities will obviously be affected by what instructional programs are, but they cannot be limited to the stated needs of those programs.

The means of informing libraries' publics about how to use libraries to best effect must vary according to the publics' needs and availabilities in terms of time, travel, etc. Unified programs of library orientation with some of the responsibility for their design and implementation lodged in libraries make a lot of sense, but close coordination with other academic units is needed to avoid costly overlap and confusion. The same kind of coordination is needed so that libraries will provide what is needed in terms of the curriculum without having to interpret needs

through the sometimes faulty reporting or requests of students.

Whenever there is renewed interest in the basics, under whatever rubric the basics are described, there is usually loss of interest and support for libraries. At this time, libraries need to make strong affiliations with the basic educational programs that are being strengthened, without losing their linkages with such aspects of the educational program as those for the gifted, the handicapped, the special learners, etc.

Library Education. Although library education is blamed for much of what is wrong with librarianship, especially its conservative characteristics, whenever reform or improvement is attempted, library educators are usually first among those asked to assist, as well as among those first to note the needs and directions for change. Better rapport and mutual respect between library educators and their colleagues in library service are recognized needs, but in addition, there is need for library educators to gain increased respect from their academic colleagues. Professional education is often seen as some kind of technical-school program even by fairly open-minded academics. Library educators need to work to destroy such attitudes. Resulting improvements in status and recognition for themselves would have similar efficacy for practicing librarians.

If, as a result of recent critiques of education, the teaching profession polices itself by requiring competency tests for pre-service students and more stringent certification requirements as well as standards for continuing education, librarianship would do well to incorporate to the extent practical as many of those more stringent requirements as possible. Especially when the masters degree in librarianship is being challenged as the standard for entry-level professional positions, the possibility of nationally coordinated examinations deserves more careful exploration than it has received in the past.

Among the linkages that need to be strengthened in librarianship are those among library education programs. Exchange of information is probably more limited than in recent decades when plans for institutes and fellowship programs and more frequent seminars for library educators brought library educators together. It also seems that nationwide (not federally sponsored) effort might well be focused on the continuing areas of shortages of

library educators, notably teachers of cataloging and organization. Similarly, better deployment of those educators whose specializations are in declining demand might be achieved if it were recognized and addressed as a nationwide problem, rather than an isolated instance.

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